

THE
UNCERTAINTY
OF THE
SIGNS of DEATH,

And the DANGER of
Precipitate Interments and Dissections,
Demonstrated,

- I. From the known Laws of the Animal Œconomy.
- II. From the Structure of the Parts of the Human Body.

AND

- III. From a great Variety of amusing and well-attested Instances of Persons who have returned to Life in their Coffins, in their Graves, under the Hands of the Surgeons, and after they had remained apparently dead for a considerable Time in the Water.

WITH

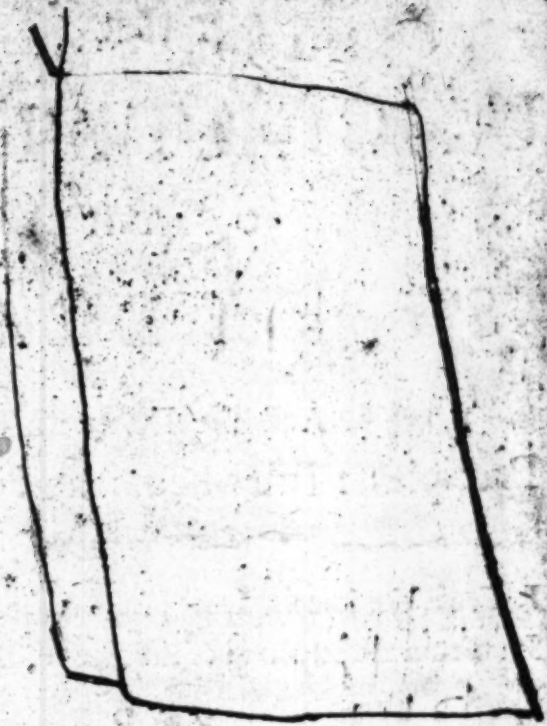
Proper DIRECTIONS, both for preventing such Accidents, and repairing the Misfortunes brought upon the Constitution by them.

To the Whole is added,

A Curious and Entertaining ACCOUNT of the FUNERAL SOLEMNITIES of many Ancient and Modern Nations, exhibiting the Precautions they made use of to ascertain the Certainty of Death.

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W. Ellesh Shaw

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THE
UNCERTAINTY
OF THE
SIGNS of DEATH, &c.

SECT. I.

THO' Death, at some Time or other, is the necessary and unavoidable Portion of Human Nature in its present Condition, yet it is not always certain, that Persons taken for dead are really and irretrievably deprived of Life; since it is evident from Experience, that many apparently dead, have afterwards proved themselves alive by rising from their Shrowds, their Coffins, and even from their Graves: It is equally certain, that some Persons, too soon interred after their supposed Decease, have in their Graves fallen Victims to a Death which might otherwise have been prevented, but which they then find more cruel than that procured by the Rope or the Rack. Incontestable Facts evince, that

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some Subjects, too rashly laid open, have upon feeling the Smart of the dissecting Instruments, by their mournful Shrieks and Cries, discovered their too certain Marks of Life, and by that lamentable Circumstance exposed the unwary Operator to eternal Infamy, and the implacable Indignation of the surviving Friends.

(1.) Some may possibly look upon such Relations as fabulous and chimerical, and imagine it a Piece of Credulity below the Dignity of human Reason to believe, that *Johannes Duns Scotus* bit his own Hands in his Grave, or that the Emperor *Zeno* exercised the like Piece of distracted Cruelty on himself after reiterated Groans, distinctly heard by those who watched him. But tho' we should grant, that Narratives of Accidents which happened so long ago, are purely spurious, yet surely we must yield a ready Assent to the Testimonies of Persons, whose Candour and Veracity we have no Reason to suspect; who only speak of things they have seen, and some of whom are not only still alive, but also capable of giving distinct Accounts of what has happened before their own Eyes.

Thus the learned *Lancisi*, first Physician to Pope *Clement XI.* in his Treatise *De Morte Subit.* Lib. I. Cap. xv. N. 2. speaks in the following Manner: "Histories and
" Relations are not the only Proofs which
" convince



“ convince me, that many Persons, suppo-
“ sed to be dead, have shewn themselves
“ alive, even when they were ready to be
“ buried, since I am induced to such a Be-
“ lief from what I myself have seen ; for I
“ saw a Person of Distinction, now alive,
“ recover Sensation and Motion, when the
“ Priest was performing the funeral Service
“ over him in the Church : A Circum-
“ stance which struck the By-standers with
“ a Degree of Terror superior to their
“ Surprize.” *Peter Zacchias*, a celebrated
Physician of *Rome*, in his *2. Med. Leg.*
T. iii. Conf. 70. N. 2. informs us, that,
“ In the Hospital which takes its Name
“ from the Holy Ghost, a young Man be-
“ ing seized with the Plague, by the Vio-
“ lence of the Disease fell into so perfect a
“ Syncope, that he was accounted dead,
“ and consequently had his Body laid
“ among those, who having died of the
“ same Disorder, were to be interred with
“ the utmost Expedition ; but in the Boat
“ in which these Carcasses were carried over
“ the *Tyber* to the destined Place of Inter-
“ ment, the young Man discovered some
“ Signs of Life, and was for that Reason
“ conveyed back to the Hospital, where he
“ perfectly recovered Life ; but two Days
“ after falling into a like Syncope, he was
“ judged irreparably dead, so that his Body
“ was without any farther Hesitation laid

“ among those destined for the Grave;
 “ notwithstanding which, he once more re-
 “ turned to Life, and having particular
 “ Care taken of him, was by the Use of
 “ proper Remedies so perfectly cured of
 “ his Disease, that he is now alive.” To
 which the Author adds: “ I know that in
 “ Rome, during this Plague, several Per-
 “ sons were buried for dead, tho’ they were
 “ really alive.”

Philip Peu, a successful Surgeon and
 Man-Midwife in *Paris*, with a Degree of
 Candour no less uncommon than laudable,
 in his *Prax. Obstetr.* II. C. ii. § 2. relates
 an unlucky Accident which happened in his
 own Hands; for being warmly solicited to
 perform the *Cesarian* Section on a pregnant
 Woman, whom he thought perfectly dead,
 because he perceived no Pulsation in the
 Sides of the Breast, and because a Mirror
 applied to her Mouth was not tarnished by
 her Breath, he did not hesitate to begin the
 Operation; but he had hardly plunged the
 Point of his Instrument into the Integu-
 ments, when the Trepidation or Trembling
 of the Patient’s Body, the Grinding of her
 Teeth, and the Motion of her Legs, con-
 vinced him, tho’ too late, of his Rashness.
 This Blunder filled his Mind with such Ter-
 ror, that he bound himself by an Oath,
 never for the future to attempt the same
 Operation, till he was thoroughly satisfied
 with

with respect to the Death of the pregnant Woman. The like Misfortune is said to have lately happened to a Surgeon ordered to lay open the Body of a certain Man of Quality before twenty-four Hours, after his supposed Death, were expired. And it is sufficiently known to what Hardships and Inconveniencies the like Accident exposed *Vesalius*, (2.) the greatest Anatomist of the Age in which he lived. But if these well-vouched Histories, consecrated to Immortality, and faithfully handed down to latest Generations in the justly celebrated Productions of their respective Authors, should be disregarded, we can produce living Witnesses to attest Facts of the same Nature: But omitting many of this Kind, we shall only mention those to whose Vouchers the Curious or Incredulous may still have Recourse for Satisfaction.

The first Evidence we shall then produce is Father *Le Clerc*, formerly Principal of the College of *Lewis* the Great, and a Man universally esteemed for Probity and Candour: This Gentleman will inform any Person, who has a Mind to apply to him, that the Sister of his Father's first Wife being interred with a Ring on her Finger in the publick Church-Yard of *Orleans*, next Night a Domestick, induced by the Hopes of Gain, uncovered and opened the Coffin, but finding that he could not pull the Ring

off the Finger, began to cut the latter; the violent Agitation produced in the Nerves by the Wound, roused the Woman, whose hideous Shrieks, extorted by the Pain, not only struck Terror into the sacrilegious Robber, but also put him to Flight without his intended Booty; the Woman in the mean time disengaged herself, as well as possible, from her Shroud, returned home, and lived with her Husband ten Years, during which Time she furnished him with an Heir and Representative of his Family.

Mr. *Joseph Marechal*, Chaplain of the Metropolitan Church of *Paris*, Prior of *St. John's de la Motte au Mans*, and a Man whose Probity and Attachment to Truth are genuine Ornaments to the sacred Character he bears, attests, that about the Year 1714, when passing through the Street of *Jean Robert*, he saw a Woman wrapt up in a Woollen Covering, and sitting in an Arm-Chair at the Door of an House, hard by the Coffin in which she had been conveyed thither, and from which she had been but just before released. The same Gentleman declares, that in the Year 1722 or 1723, he saw certain Persons meet the publick Bearers, who were coming into the Street called *Champ Fleury*, in order to convey a Corpse to the Place of Interment, and heard the former tell the latter, that they might return, since

since the Person whom they believed to be dead, was alive, and but lately released from his Coffin.

Mr. *Benard*, a skilful Surgeon of *Paris*, certifies, that in the Parish of *Riol* he himself, when a young Man, together with his Father and several other By-standers, saw a Monk of the Order of *St. Francis*, who had been buried three or four Days, taken from his Grave, breathing and alive, with his Arms lacerated near the Swathes employed in securing them; but he died immediately after his too late Releasement (3.) This Gentleman also asserts, that a faithful Narrative of so memorable an Accident was drawn up by publick Authority, and that the raising of the Body was occasioned by a Letter wrote from one of the Monk's Friends, in which it was affirmed, that he was subject to Paroxysms of the Catalepsy.

Mrs. *Landry*, a Gentlewoman of uncontested Veracity, and Widow of a late skilful Engraver of the same Name, certifies, that her Father was for some Hours laid out as dead, and that by conveying some Salt-Water into his Mouth, at the Instigation of a Gentlewoman who was his Friend, and resolutely affirmed that he was not dead, he recovered, and was not only cured of that Indisposition, but also lived a long Time after it.

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The Facts already related seem sufficient to confirm the Words of the celebrated *Lancisi*, when he tells us, “ That in the
 “ Time of the Plague Things are trans-
 “ acted with such Disorder and Precipita-
 “ tion, that little Care is taken to distin-
 “ guish those who are really dead, from
 “ such as only appear to be deprived of
 “ Life.” May we not therefore justly sus-
 pect, or rather, have we not good Reason
 to believe, that the like unlucky Accidents
 happen during the Times of violent epide-
 mical Disorders, in which vast Numbers of
 Persons, who have been too soon interr’d,
 probably call aloud from their Graves for a
 due Vengeance on those, who have barba-
 rously exposed them to a violent Death,
 which a little Patience might have prevented.
 The same Horror, Murder, and Destruction,
 no doubt, attend the precipitate and tu-
 multuous Interments after Battles and Sieges;
 where Persons only half-dead, or possessed
 of perfect Life, are promiscuously thrown
 into Ditches with such as are really and irre-
 trievably dead.

S E C T. II.

THE elegant and judicious *Celsus*, in
 Lib. II. Cap. v. informs us, that the
 justly celebrated Philosopher *Democritus* was
 of Opinion, that the Signs of Death were
 not

not sufficiently certain (4). In Apoplexies, in Syncope, and in Suffocations, whether true, such as those of Persons hanged, strangled, drowned; shut up in too confined Places, or suddenly cut off by pernicious Vapours and Exhalations; or of the spurious Kind, such as those of hysteric Women, hypocondriac Patients, and Persons racked by violent Passions of the Mind, or seized with Disorders of an analogous Nature, we are often deceived with respect to the Signs of Death: But this Misfortune is less owing to the Imperfection of *Medicine*, than to the Ignorance or Negligence of Physicians, and the Carelessness, Poverty, or perhaps sometimes the wicked Disposition of those who have the Care and Management of the Sick. The Redness of the Face, the Heat of the Body, and the Softness of the flexible Parts, are precarious and uncertain Marks of a remaining Principle of Life; and on the contrary, the Paleness of the Complexion, the Coldness of the Body, the Rigidity of the Extremities, and the Abolition of the external Senses, are very dubious and fallacious Signs of a certain Death. The Pulsation of the Arteries and Respiration are infallible Signs of Life, because without the two first the last cannot subsist: But we are by no Means to imagine, that these two Motions are totally extinguished, when they become invisible to

the Eye, or imperceptible to the Touch. If we continue to investigate these Motions for some Time, we may perhaps discover the Pulse, which was imperceptible in the Wrist when straight or reclined, by gently bending it forward; since in the last Situation the relaxed Artery affords a free Passage to the Blood, tho' conveyed to it with a very inconsiderable Force; whereas the Tension of the Artery in the two first Situations entirely stops the progressive Motion of the vital Fluid. If we do not perceive the Pulsation of the deep-seated Artery near the Base of the *Radius**, we may perhaps discover it between the Thumb and the adjacent Bone of the *Metacarpus*†; but we are to guard against a too strong Compression of the languid Artery in this Part, lest we should by that Circumstance occasion a Defect of the Pulse; nor are we inadvertently to take the Pulsation of the arterial Extremities in the Points

* The *Radius* is one of the two Bones of the Fore-Arm, which in the most ordinary Situation of that Part constitutes its superior Portion; it in a particular Manner possesses that Place, when the Pulse is felt.

† The *Metacarpus* is an Assemblage of various Bones, which compose the Palm of the Hand. Under the Skin, between the Thumb and that Bone of the Metacarpus which sustains the Fore-Finger, is lodged an arterial Ramification so considerable, that its Pulsation is not only perceptible to the Touch, but also visible to the Eye.

Points of the Fingers, for that of the Artery we feel, since by such a Mistake we may be induced to believe the Person alive, after he is really dead (5). But tho' all these Scrutinies should prove unsatisfactory, we are not for that Reason to be totally discouraged. From the Pulse of the Arm we must proceed to that of the Temples, and if this should escape us, we must have Recourse to the Carotid Arteries, Vessels not only of larger Diameters than the others, but also more directly exposed to the Action of the Blood propelled from the Heart: But these Arteries must not, like the others, be gently felt, since before we can obtain due Satisfaction, we must plunge the Fingers pretty deep, under the posterior Margin of one of the Muscles called the *Sterno-Mastoidæi* *. A skilful Hand can easily trace the Crural Arteries, near the Groins, in order to discover the State of the Circulation. Besides these different Scrutinies we may also find Signs of Life in the Parts adjacent to the Heart;

* The Muscles called *Sterno-Mastoidæi* are two Muscles, whose inferior Parts adhere to the Sternum, a longitudinal Bone, dividing the Fore Part of the Thorax into two equal Parts; but the superior Parts of the Muscles are fixed to an Eminence of one of the Bones, which constitute the Base of the Cranium, and this Eminence may be felt under the posterior Part of the Ear: These are two of the Muscles which serve to turn the Head on the Neck.

Heart ; for this Purpose the Body must not be laid on its Back, but almost entirely on one or other of the Sides ; for when the Body is laid on its Back, every one must be sensible, that the Heart, as it were, subsides towards the Spine, and is so removed from the Præcordia, that its Apex acts very gently, and sometimes not at all on them. Tho' the Apex of the Heart is generally directed to the Left Side, yet there have been Persons in whom its Pulsation was perceptible in the Right ; and upon laying open such Subjects after Death, an entirely preternatural Disposition has been found, not only with respect to the Situation of the Heart, but also of all the Thoracic and Abdominal Viscera ; and perhaps this preternatural and uncommon Disposition of the Parts has sometimes misguided Physicians in treating Disorders of the Liver, of the Spleen, of the Colon, and especially of the Cæcum or Head of the Colon. Whatever Care and Circumspection we use in making the Scrutinies hitherto specified, yet the Pulsation of the Heart and Arteries is sometimes so insensible (6), that we are very subject to be deceived, and believe the Person dead, who has few Signs of Life, if we do not satisfy ourselves with respect to his State and Condition by other Signs. Respiration affords Marks no less precarious than those of the Pulse ; since it is sometimes so languid, and
as

as it were over-powered, that neither the Eye nor the Hand can discover the slightest Motion of the Breast; for as very faint Vibrations of the Heart and Arteries, together with the free, tho' insensible Entry of the external Air into all the Ramifications of the Bronchia, are sufficient to prolong Life for some Time, even tho' there be no sensible Motion or Pulsation of the exterior Arteries; so there is almost nothing requisite to supply the Place of a manifest and sensible Respiration, but the elastic Force of the Bronchia and Pulmonary Vesicles assisted by slight Oscillations of the Heart and Pulmonary Artery (7). But tho' we are furnished with no more certain and infallible Methods, than those already specified, of acquiring a satisfactory Knowledge of the State of the Organs subservient to the Circulation of the Blood, yet this Misfortune does not supercede or cancel our Obligation to examine the Respiration, and the Instruments of Motion and Sensation; since by such a Neglect we may possibly pronounce the Person dead, who is alive, and by such a fatal Blunder deprive him at once of a present Recovery and subsequent Life.

S E C T. III.

DIFFERENT Authors have proposed different Methods of distinguishing

ing such as are really dead, from those whose Death is still uncertain. Thus, in order to render a languid and over powered Respiration sensible, some, with a steady Hand, apply the Flame of a Wax-Candle to the Mouth and Noftrils, imagining that the tremulous Motion of the Flame from one Side to another, when not produced by some other Cause, is a Proof that Life is not as yet destroyed; whereas they form the contrary Judgment, when the Direction and Situation of the Flame are continually the same. Others pretend to ascertain the Reality of Life or Death by applying to the Mouth or Noftrils a little fine Wool or Cotton. But these Methods are as fallacious as they are common; since Persons not only alive, but also blessed with perfect Health, may by checking their Respiration, frustrate the Ends of such precarious Scrutinies: Of this any one may be convinced, by making the Experiment on himself. Some foolishly imagine, that when a Mirrour applied to the Mouth and Noftrils is tarnished, it affords a Proof of a still subsisting Respiration; but this Method is attended with no smaller Degree of Uncertainty than the others; since almost similar Vapours are discharged from the Mouth and Noftrils of a really dead Person, who is as yet warm. Others laying the Body on its Back in such a Manner, as to secure it most effectually from Motion,
put

put a Glas full of Water upon the *Xiphoide Apophysis* or *Epiphysis* *, imagining, that when they perceive Motion in the Water, Life is not as yet ended ; whereas they take a perfect State of Rest in the Liquor to be a Proof of certain Death : But in order to give this Method of Scrutiny all the Advantage and Certainty of which it is susceptible, the Body ought not to be placed entirely on the Spine of the Back, but turned in such a Manner to one of the Sides, as that the Extremity of the Cartilage of the ante-penult Rib may be elevated as much as possible, and have the Vessel containing the Water placed upon it ; since it is much better disposed to render the slightest Motion of the Breast sensible, than the *Xiphoid* or *Ensisiform Cartilage*. But it is certain from Experience, that a slow, gentle, and insensible Motion of the *Diaphragm* alone †, without the least Motion

* It is before observed, that the Sternum is a longitudinal Bone dividing the Breast into two equal Parts ; this Bone at its inferior Part, commonly called the Pit of the Stomach, terminates in a kind of sharp or pointed Production, generally called the *Xiphoide* or *Ensisiform Cartilage*, from the Resemblance it bears to the Point of a Sword or Dagger. The Terms *Apophysis* or *Epiphysis* imply nearly the same with the Word *Excrescence*.

† The *Diaphragm* is a muscular Kind of Partition,

Motion of the Ribs, is sometimes sufficient in the Cases we have specified, to support and carry on Respiration; and in such a State it is absolutely impossible, that the Water should have any Motion communicated to it: We are however carefully to guard against taking the fermentative Motion of the Abdominal Humours of a Corpse, which may possibly be conveyed to the Water in the Vessel, for the genuine and real Motion of the Organs subservient to Respiration; neither ought we, after a fruitless and unsuccessful Trial of these Methods, to imagine that there is no Hope left, and for that Reason cruelly abandon, to an unavoidable Death, a Patient as yet not dead, and who perhaps would not die at that Juncture, if we should neglect no Means of recalling him to Life; for this Purpose, we ought to irritate his Nostrils by introducing into them Sternutatories, Errhines, Salts, stimulating Liquors, Synapisms, the Juice of Onions, Garlic, and Horse-radish, or the feather'd End of a Quill, or the Point of a Pencil: We must also rub his
Gums

tion, separating the Thorax from the Abdomen, and which bending downwards in the latter, by that Means not only augments the Capacity of the former, but also contributes greatly to facilitate the Entry of the Air into the Lungs: In some Persons the Dilatation of the Breast, even in the natural State, depends entirely on the *Diaphragm*.

Gums frequently and strongly with the same Substances ; stimulate his Organs of Touch with Whips and Nettles ; irritate his Intestines by Means of Clysters and Injections of Air or Smoke ; agitate his Limbs by violent Extensions and Inflexions ; and if possible shock his Ears by hideous Shrieks and excessive Noises ; only we ought by no Means to conclude, that the Sense of Hearing is totally lost, because the Person under Examination does not discover himself to be possessed of it, by the slightest Motion of the Eye-lids, the Lips, the Fingers, or any other Parts of the Body ; for as it is generally thought, that the Heart is the first Part of the Body which moves, so those who, after they are deprived of all the other Senses, give distinct Relations of every Thing they have heard during that Time, can attest, that the Sense of Hearing remains longer than any of the rest : The Truth of this is in a remarkable Manner confirmed by the Testimony of a celebrated Priest, who having affirmed, that it was unlawful to give Absolution to a dying Person, who by no Signs discovered that he had the Sense of Hearing, altered his harsh Opinion, after he himself had fallen into a Deliquium so violent, as to deprive him of all Motion, tho' at the same Time he distinctly heard the whole Conversation of

those

those, who were present, when his Misfortune happened.

SECT. IV.

IN order to discover the Signs of Life or Death, it is in the last Place necessary to call in the Aid of that Part of Medicine, whose Effects, according to *Celsus*, are most sensible and manifest. The Chirurgical Measures, then esteemed most proper for these important Purposes, are principally Wounds made either with pricking or cutting Instruments, or by Means of Fire; these Dilacerations of the Parts have sometimes recalled from apparent Death to real Life, Persons on whom milder Methods had no more Effects, than they would have produced on Stocks on Statues; for the minute Fibrils of the Extremities of the Nerves, which principally constitute the Organ of Touch, being vellicated, divided, lacerated and stript of the Epidermis which covers them, by the violent Action of Fire, or of a cutting or pricking Instrument, with inconceivable Expedition, and in a Manner hitherto unknown, transmit a Sense of the most exquisite and lively Pain to the *common Sensory* or Seat of all the Sensations. For this Reason, pricking the Palms of the Hands, or the Soles of the Feet, and scarifying the Scapulæ,

Scapulæ, Shoulders and Arms, are Methods which have often proved successful in determining with respect to Deaths, before dubious and uncertain. From this we may easily account for the Success of the rash Conduct of a certain Person, who, thrusting a long Needle pretty far under the Nail of an Apoplectic Woman's Toe, who had no Signs of Life, by that seemingly cruel Expedient quickly restored her to herself. The Instances already enumerated sufficiently evince, that such Incisions have shewn the Persons, on whom they were made, to be really alive after they were taken for irretrievably dead. But the Scrutinies made by Burnings are generally esteemed the most efficacious, of all others, for deciding with respect to Life or Death. Thus the celebrated *Lancisi*, in *Tr. de Mort. Subit. Lib. II. Cap. v. N. 11.* informs us, that some labouring People, who could not by the most strong and powerful Remedies, be roused from profound Apoplexies, have been instantly restored to Life by applying hot Irons to the Soles of their Feet; other Authors recommend the Crown of the Head, as the Place most proper for an Operation of this Kind: But we may with the same View, and with equal Success, apply Water when boiling, common Wax when melted, *Spanish* Wax when burning, or even a Match when lighted, to the Hands, to the Arms,

or

or to the Skin of any other Part of the Body. Of the same Nature we may also reckon the violent Frictions of a certain Physician, mentioned in *Eph. Nat. Cur. Die 1. an. 8.* who perceiving, that the Limbs of a Man who was believed to be dead, were still flexible and pliant, tho' no Pulse was felt, tho' the Immobility of the Cotton applied to his Mouth, shewed that his Respiration was gone, and tho' the most acrid Clysters were injected to no Purpose, yet ordered the Soles of his Feet to be strongly and incessantly rubbed with a coarse Hair-cloth, immersed in an highly saturated Brine; by which Means he recalled his Patient to Life in three Quarters of an Hour. However efficacious these Methods of determining, with respect to Life or Death, may appear, it is nevertheless certain, that they are sometimes insufficient and fallacious: For Confirmation of this I shall, without collecting other Instances, appeal to a memorable History communicated to the Royal Academy of Sciences, in which we have the surprizing Account of a certain Soldier, who had no Sense of Pain created by the Application of a red hot Iron to the Parts of his Body, tho' all the Organs of voluntary Motion were in a good Condition.

S E C T. V.

IF any should ask, why so many Scrutinies? or why so fond of Incisions, Punctures, and Burnings? I answer, *The Fate of others strikes Terror into myself** : Twice the Physician condemned me to the Grave; first in my Infancy, and then in my Youth. Besides, the celebrated *Zacchias*, in *Qu. Med. Leg.* Tit. 1. q. 9. n. 54. justly observes, "That no one ought either to
 " blame or ridicule the most prudent Phy-
 " sicians for trying all the Methods they
 " possibly can, on those who are either
 " really dead, or believed to be so, in
 " order to discover whether they have still
 " any remaining Principle of Life." *Lancisi* also, in *Tr. de Mort. Subit.* L. I. Cap. 15.

* Mr. *Winslow* here alludes to a Passage of one of the Fables of *Phædrus* relating to a sick Lion, who in his Distress received a Visit from a Fox; but the Fox, without approaching the Lion, thought proper to testify his Concern and Sorrow at a Distance: Upon this, the Lion asked the Reason of such a Piece of Conduct, and the Fox as readily satisfied him by the following Answer; *The Example of others makes me afraid; for I see the Footsteps of those who have entered into your Den; but I can discover no Marks of their ever having returned.* This Allusion is just and beautiful; since for one Person preserved after Interment, many have in all Probability died in their Graves.

15. to the same Purpose, quotes the following Expostulation of the incomparable *Quintilian*; “ For what Purpose do ye imagine that long delayed Interments were
 “ invented? Or on what Account is it that
 “ the mournful Pomp of funeral Solemnities is always interrupted by sorrowful
 “ Groans and piercing Cries? Why, for
 “ no other Reason, but because we have
 “ seen Persons return to Life, after they
 “ were about to be laid in the Grave as
 “ dead. For this Reason, adds *Lancisi*,
 “ the Legislature has wisely and prudently
 “ prohibited the immediate, or even too
 “ speedy Interment of all dead Persons;
 “ and especially of such as have the Misfortune to be cut off by a sudden Death.”

The same Author also in the subsequent Chapter earnestly intreats, not only Physicians, but likewise all benevolent and well-disposed Persons, who may have an Opportunity to try these and all other possible Methods of recalling the Dead to Life. And in *Lib. II. Cap. 5.* he warmly exhorts Physicians to be diligent and industrious in finding out new Measures, if not for a perfect Recovery of the Dead, yet at least for regaining a happy, tho’ perhaps a short Portion of Time, in which they may be duly touched with a Sense of their Sins, and recommend themselves to that Being, who is alone able to pardon them (8).

The

The celebrated *Riolanus*, formerly an Ornament to the Faculty of Medicine in *Paris*, has long ago furnished us with a similar Instance of chirurgical Compassion ; since when, speaking of the Bodies of hanged Persons, by public Authority destined to Dissection, he tells us ; “ That so long as
“ the Body is warm, and the Person but
“ lately executed, we are not to dissect
“ him ; since, if there is still any Prospect
“ of recalling him to Life, we are equally
“ bound by the Principles of Humanity
“ and Charity to do all we can for that Purpose, in order to procure him, if possible, a favourable Opportunity of Repentance.” But as we have not, especially in the Cases hitherto specified, any absolutely certain Signs of Death, except the livid Spots which appear on the Skin, and the cadaverous Scent of the Subject, which is widely different from all other Smells, even that arising from the Excrements, or the still more disagreeable Odour peculiar to certain malignant Ulcers ; the safest Way is to let the supposed dead Person remain in Bed, covered with Clothes, and his Head supported with a Bolster and Pillow, as if he was alive, and not to put him in his Shroud and Coffin, till two or even three Days after, when his whole Body is become spontaneously cold under the Bed-clothes, and all his Limbs are rendered rigid and inflexible.

Terilli,

Terilli, a celebrated Physician of *Venice*, in *Tr. de Causis Mort. repentini*. Sect. vi. Cap. 2. gives us the following memorable and important Advice; “ Since, says he, “ the Body is sometimes so depriv’d of “ every vital Function, and the Principle “ of Life reduc’d so low, that it cannot be “ distinguished from Death, the Laws both “ of natural Compassion and reveal’d Religion oblige us to wait a sufficient Time “ for Life’s manifesting itself by the usual “ Signs, provided it should not be as yet “ totally extinguished; and if we should “ act a contrary Part, we may possibly become Murderers, by confining to the “ gloomy Regions of the Dead, those who “ are actually alive. Now the Time, by “ the Generality of Authors, allotted as sufficient for this Purpose, comprehends “ three natural Days, which amount to “ about seventy-two Hours; and if during “ this Interval no Marks of Life should “ appear, but on the contrary the Body “ should diffuse a fetid and cadaverous “ Smell, we may rest satisfied with the “ Certainty of the Death, and consequently “ proceed to the Interment without any “ Hesitation of Mind, or Scruple of Conscience.”

The celebrated *Zaccbias* is of the same Opinion; since in *Tom. III. Conf. 79. N. 21.* he tells us, “ That there is no other “ infallible

“ infallible Proof of Death, but a beginning Putrefaction in the Body (9).” We ought not therefore to be surpriz’d at the seemingly whimsical Precaution of some Persons, who have in their Wills ordered, that they should not be put in their Coffins till at least forty-eight Hours after their apparent Death, and till all the different Methods of Incision, Puncture, and Burning, have been tried upon them, in order to acquire a greater Certainty of their Deaths. But without running back into past Times for Instances of this Precaution, ’tis sufficiently known, that a Will of the same Nature was in the Beginning of the Year 1742 not only made by Madame *de Corbeville*; a Lady of Distinction and a Canoness, but also faithfully and punctually fulfilled by her illustrious Executor. As for my own Part, I earnestly request of those who shall have an Opportunity of seeing me dead, that they would not only use the Methods already prescrib’d, but also every other possible Expedient, in order to satisfy themselves whether I have really paid the last Tribute of human Nature. From what has been said ’tis sufficiently obvious, that the Signs of a dubious Death are less uncertain by Chirurgical, than by any other Methods.

A D D I T I O N S.

(I.) **A** SINGLE Fact of whatever Kind, when well attested, is sufficient to make such lasting Impressions on the prudent and judicious Part of Mankind, as are capable of keeping them continually on their Guard; but this is not universally the Case; for Persons who pretend to think in a Manner different from other Men, are always so full of Scruples, and so inviolably attach'd to certain Peculiarities of Thought, rather inspir'd by a Desire of being esteem'd singular, than produc'd by a Dread of believing without sufficient Evidence, imagine that they have a just Title to look upon single Facts as exceptionable Accidents from which no general Conclusion can be drawn. Others have their Minds but slightly and superficially touch'd by the most striking Incidents of this Kind; whilst the Imaginations of others are so insensible, as to require reiterated Shocks before they can be thoroughly rous'd to a due Regard and Attention to Truth.

As an Author, therefore, who is desirous of being universally useful, or who writes
on

on Subjects in which all Mankind without Exception are deeply interested, ought to overlook or neglect none of those, into whose Hands his Works may fall, I shall add to the Histories collected by Mr. *Winslow*, in order to prove the Uncertainty of the Signs of Death, some others, whose Multiplicity will justify the Precautions of the Prudent, destroy the vain Pretexts of the Incredulous, make deeper Impressions on the Minds of the Giddy, and alarm those whose Insensibility calls for the most powerful and commanding Evidence.

The Truth, then, established in Mr. *Winslow's* Dissertation was not first discovered by that learned Gentleman, since the most remote and distant Ages furnish us with glaring Instances of the Uncertainty of the Signs of Death.

Thus *Plutarch* informs us, that a certain Person falling from an Eminence was cut off by the Fall; tho' there was not the least Appearance of any Wound; but three Days after, he suddenly resumed his Strength, and returned to Life as his Friends were conveying him to the Grave.

To this History *Kirchman* adds the following related by *Apuleius*.

Asclepiades, a celebrated Physician, in his Return from his Country Seat met a large Company conveying a Corpse to the Grave. A Principle of Curiosity induced him to ask

the Name of the deceased Person ; but Grief and Sorrow reigned so universally, that no one returned him an Answer: Upon which, approaching the Corpse, he found the Whole of it rubbed over with Perfumes, and the Mouth moistened with a precious Balm according to the Custom of the *Greeks*; then carefully feeling every Part, and discovering latent Signs of Life, he forthwith affirmed that the Person was not dead. Some inclined that his Discourse should be listened to, whilst others, especially the Friends, and above all the Executors of the Deceased, ridiculed the Physician, and slighted his Profession; so that *Asclepiades* with some Difficulty obtained a short Respite: But at last the Deceased being dragged from the Hands of the covetous Bearers, was carried back to his own House, where by the Efficacy of proper Remedies he was forthwith recalled to Life. *Celsus* in Book II. Chap. 6. makes mention of this Accident.

Eusebius, *Theodoret*, and *Calixtus*, in *Tr. de Immort. Anim.* Cap. viii. from the tenth Book of *Plato's Republic*, relate the History of one *Erus*, an *Armenian*, who was slain in Battle. Ten Days after, when the surviving Soldiers came with a View to inter the Dead, they found all the Bodies corrupted except his; for which Reason, they conveyed him to his own House, in order to have him interred in the usual Manner; but

but two Days after, to the great Surprize of all who were present, he returned to Life when laid on the Funeral Pile. This Narrative related by *Quenstedt* is taken from *Korman's* Treatise *De Miraculis Mortuorum*, and we have Reason to believe that it is the same with the Accident related by *Valerius Maximus*, Book I. Chap. viii. for there is no Difference of Circumstances, except with respect to the Name and Native Country of the deceased Person, whom the last quoted Author calls *Phereus*, and says he was a Native of *Pamphilia*; besides, what induces me to believe, that in one or other of the Relations there is a Mistake of the Name, is because *Valerius Maximus* also quotes *Plato* as his Voucher, and because it is hardly possible to conceive, that two Events so exactly similar in every minute Circumstance should happen, *Korman* however, in his Treatise *De Miraculis Mortuorum*, relates both these Facts, ascribing to *Plato* the History of *Phereus* of *Pamphilia*, and quoting *Noel Taillepied*, in his Treatise *De Apparitione Spirituum*, for the Narrative relating to *Erus* the *Armenian*, without mentioning that the last quoted Author also took it from *Plato*: But whether there is any Mistake or not, *Quenstedt* from these two Histories very justly concludes, " That the Soul sometimes
 " remains in the Body, when the Senses are
 " so fettered, and as it were locked up, that

“ it is hard to determine whether the Person
“ is dead or alive.”

Pliny, in his Natural History, Book VII. Chap. 52. which treats of *those who have return'd to Life when they were about to be laid in the Grave*, tells us, that *Acilius Aviola*, a Man of so considerable Distinction, that he had formerly been honoured with the Consulship, return'd to Life when he was upon the Funeral Pile; but as he could not be rescued from the Violence of the Flames, he was burnt alive. The like Misfortune also happen'd to *Lucius Lamia*, who had been Prætor. These two shocking Accidents are also related by *Valerius Maximus*.

Celius Tubero had a happier Fate than his two Fellow-Citizens; since, according to *Pliny*, he discover'd the Signs of Life before it was too late. His State however was far from being eligible, since being laid on the Funeral Pile, he stood a fair Chance of being expos'd to the like Misfortune. *Pliny* from the Testimony of *Varro* adds, that when a Distribution of Lands was making at *Capua*, a certain Man, when carried a considerable Way from his own House, in order to be inter'd, return'd home on Foot. The like surprizing Accident also happen'd at *Aquinum*. The last Instance of this Nature related by the Author occur'd at *Rome*; and *Pliny* must, no Doubt, have been intimately acquainted with all its most minute Circum-

Circumstances; since the Person to whom the Misfortune happen'd, was one *Cerfidius*, the Husband of his Mother's Sister, who return'd to Life after an Agreement had been made for his Funeral with the Undertaker, who was probably much disappointed when he found him alive and in good Health.

These Examples drawn from the *Roman* History greatly contribute to establish the Uncertainty of the Signs of Death, and ought to render us very cautious with respect to Interments. But that, we may not interrupt the Course of our Histories, we shall in another Place consider the Precautions taken by the *Romans*, in order to ascertain the Death or Life of their Citizens: We must however observe, that *Manilius* so firmly believ'd that his Countrymen had inter'd living Persons, that in *Astronom.* 4. he expressly asserts, that some had return'd to Life and risen even from their Graves.

Ex ipsis quidam elati rediere sepulchris.

Greece and *Italy* are not the only Theatres on which such tragical Events have been acted, since other Countries of *Europe* also furnish us with Instances of a like Nature.

Thus *Maximilian Misson*, in his *Voyage through Italy*, Tome I. Letter 5. tells us,
 “ That the Number of Persons who have
 “ been inter'd as dead, when they were
 “ really alive, is very great in Comparison
 “ of those who have been happily rescued
 C 4 “ from

“ from their Graves ; for in the Town of
 “ Cologne, Archbishop Geron, according to
 “ *Albertus Krantzius*, was inter’d alive, and
 “ died for want of a seasonable Release-ment.
 “ It is also certain, that in the same Town
 “ the like Misfortune happened to *Johannes*
 “ *Duns Scotus*, who in his Grave tore his
 “ Hands and wounded his Head. I am
 “ not ignorant, that one *George Herwart*,
 “ who had a profound Veneration for *Duns*
 “ *Scotus*, positively denies this Fact, as too
 “ shocking and disagreeable, in Opposition
 “ to *Bezovius*, one of the most consider-
 “ able Authors who assert it: But neither
 “ *Bezovius*, nor *Paulus Jovius*, nor *Latomus*,
 “ nor *Majoli*, nor *Vitalis*, nor *Garzoni*, nor
 “ any of the Authors who relate this Acci-
 “ dent, can be suspected of an Intention
 “ either to disguise or conceal the Truth ;
 “ so that we may reasonably give Credit to
 “ their Testimonies.”

Immediately after *Misson* subjoins the fol-
 lowing Relation : “ Some Years ago the
 “ Wife of one Mr. *Mervache*, a Goldsmith
 “ of *Poictiers*, being buried with some
 “ Rings on her Fingers, as she had desired
 “ when dying, a poor Man of the Neigh-
 “ bourhood being apprized of that Circum-
 “ stance, next Night open’d the Grave, in
 “ order to make himself Master of the
 “ Rings ; but as he could not pull them off
 “ without some Violence, he in the Attempt
 “ wak’d

“ wak’d the Woman, who spoke distinctly,
“ and complain’d of the Injury done her :
“ Upon this, the Robber made his Escape,
“ and the Woman, now rous’d from an
“ Apoplectic Fit, rose from her Coffin,
“ which for her was luckily open’d, re-
“ turn’d home to her own House, and in a
“ few Days recover’d a perfect State of
“ Health : She not only surviv’d this Mis-
“ fortune for many Years, but also bore
“ several Children, some of whom at pre-
“ sent follow the Business of their Father at
“ *Poitiers*.

What induc’d *Misson* to relate these Hi-
stories, was a certain Piece of Painting pre-
served in the *Church of the holy Apostles at*
Cologne, in order to keep up the Memory
of a certain Accident, which that Traveller
relates in the following Manner :

“ In the Year 1571, the Wife of one of
“ the Magistrates of *Cologne* being inter’d
“ with a valuable Ring on one of her Fin-
“ gers, the Grave-digger next Night open’d
“ the Grave, in order to take it off ; but we
“ may readily suppose, that he was in no
“ small Consternation when the suppos’d
“ dead Body squeez’d his Hand, and laid
“ fast hold of him in order to get out of
“ her Coffin : The Thief however disen-
“ gaging himself, made his Escape with all
“ Expedition ; and the Lady disentangling
“ herself in the best Manner she could,
“ went

“ went home, and knock’d at her own
 “ Door; and in order to get the readier
 “ Admission, and prevent her being long
 “ expos’d to the Cold, she call’d a Servant
 “ by his Name, and gave him a succinct
 “ Account of what had happen’d to her;
 “ but the Servant treated her as a Phantom,
 “ and with a Mind full of Terror ran to
 “ relate the Accident to his Master, who
 “ being as incredulous as himself, ridicul’d
 “ him for his Folly: The Lady in the
 “ mean time stood shivering in her Shroud,
 “ till at last the Door was open’d to her;
 “ after which, being warm’d, and treated in
 “ a proper Manner, she resum’d as perfect
 “ a State of Health, as if no such Misfor-
 “ tune had befallen her.”

Simon Goulart, a pretty old tho’ judicious
 Author, gives us a more accurate and cir-
 cumstantiate Detail of this Accident in *his*
admirable and memorable Histories, printed at
Geneva in the Year 1628.

The Lady, then, to whom this Misfor-
 tune happen’d, and whose Name was *Reich-*
mutb Adolch, was suppos’d to fall a Victim
 to a Pestilence which rag’d with such impe-
 tuous Fury, as to cut off most of the Inha-
 bitants of *Cologne*; soon after however, ac-
 cording to *Goulart*, she not only “ reco-
 “ vered her Health, but also brought into
 “ the World three Sons, who in Process of
 “ Time were advanced to Livings in the
 “ Church:

“ Church: But having for several Years
“ after this Deliverance liv’d honourably
“ with her Husband, she at last died a na-
“ tural Death, and was inter’d near the
“ Door of the *holy Apostles Church*, under
“ a lofty and magnificent Monument of
“ Stone. In order to perpetuate the Me-
“ mory of her Fate, there was affix’d to
“ the Monument a large Piece of Painting,
“ in which the Accident was not only re-
“ presented in a masterly Way, but also
“ describ’d in *German Verse*. In the Year
“ 1604, *John Bussenmacher*, Citizen and
“ Merchant of *Cologne*, in order to diffuse
“ the Knowledge of this Piece of History,
“ published a small Print taken from the
“ original Design; and tho’ at *Cologne* I
“ have often seen that noble Piece of Paint-
“ ing, which always warm’d my Soul with
“ the tender Impressions of Humanity and
“ Compassion, yet with the same View I
“ still preserve the Print published by *Bus-*
“ *senmacher*.”

In all this Narrative there is not a single Word of the Ascension of the *Horses* to the Granary of the surviving Husband, which however *Misson* has inserted in his Relation, tho’ I know not for what Reason; since he is so far from believing it, that he at best esteems it a Tradition or popular Error, originally suggested by those who preserved the
Memory.

Memory of this Event by Monuments posterior to its genuine Date.

As a farther Proof of the Reality of similar Resurrections, *Misson* in his third Volume relates the History of *Francis de Civille*, who, in the Registers where his Fate is recorded, is said to have been *three Times dead, three Times buried, and by the Grace of God three Times raised from the Dead*. But that we may confine ourselves precisely to what relates to the present Subject, we shall only give an Extract of *Misson's* Relation.

Francis de Civille then, a Gentleman of Normandy, was a Captain of a Company consisting of an hundred Men, in the City of *Rouen*, when it was besieged by *Charles the Ninth*; at which Time *Civille* was twenty-six Years of Age: In an Attack made by the Enemy he was wounded, and falling from the Rampart into a Ditch below it, was by some Pioneers stript of his Cloaths, thrown into a Grave along with another Body, and covered with a little Earth; in this Condition he remained from eleven o'Clock in the Forenoon, till half an Hour after six in the Evening, when his Servant came to take him out of his Grave: This faithful Domestic embracing him, perceived some Signs of remaining Life, and for that Reason carried him to a House in which he used to lodge, where he continued
five

five Days and five Nights, without either speaking, moving, or discovering the least Sign of Sensation, tho' he was now as hot by the Violence of a Fever, as he had before been cold in his Grave. The Town being taken, the Servants of an Officer belonging to the victorious Army, who intended to lodge in the House where *Civille* was, laid him upon a Straw-bed in a back Chamber, from a Window of which he was thrown by some Persons, who bore an Enmity to his Brother; but luckily he fell upon a Dung-hill, where he remained in his Shirt more than three Days and three Nights, at the End of which Time one of his Friends, surprized to find him alive, sent him to a House in *Rouen*, where his Wounds being dressed, and due Care taken of him, he was perfectly cured.

In this History I can only find two Interments and as many Resurrections; nor are any more mentioned in the *memorable and admirable Histories of Goulart*, where the Wound of *Civille*, and all the Accidents subsequent to it are fully described: But I have heard the following traditional Account of his third Interment and Resurrection.

The Mother of *Civille* happening to die big with Child in her Husband's Absence, was interred without any Thoughts of preserving the Infant by Means of the *Cesarian* Section. The Day after the Interment the
Husband

Husband coming home, was no Doubt struck with Surprize, not only at the Death of his Wife, but also at the little Care which had been taken of the Child. With a View therefore to satisfy himself, he ordered his Wife to be raised from the Grave, and an Aperture to be made in her Abdomen, from which *Francis de Civile* was taken alive: Tho' this Circumstance is foreign to our Subject, yet its surprizing Nature apologizes for its Insertion.

Simon Goulart, before quoted, has wrote a Chapter, the Title of which is, *That Persons who die of the Plague, or are cut off by any other violent and sudden Accident, ought not to be so soon interred as they generally are in several Parts of the World*: He begins this Chapter with an Extract of a Letter wrote by *William Fabri*, an eminent Surgeon, and directed to Doctor *John James Crafft*, Physician at *Neufchastel*. *Goulart* cloaths *Fabri's* Thoughts in the following Dress:

“ *Levinus Lemnus*, in the third Chapter of
 “ his Book concerning the secret Miracles
 “ of Nature, has just Reason to condemn
 “ the too-precipitate Interment of Persons
 “ over-powered by Lethargies, Apoplex-
 “ ies, or Suffocations of the Matrix; for
 “ I know there have been some, supposed
 “ to be irretrievably cut off by these Dis-
 “ orders, who, resuming Strength and re-
 “ turning to Life, have raised the Boards of
 “ their

“ their Coffins. Nor should any supposed
“ dead Persons, especially those who have
“ before been subject to Apoplexies and
“ Lethargies, be too soon confined to Coffins, because in such Disorders the Soul
“ only retires as it were to her most secret
“ and concealed Residence, in order to
“ make the Body afterwards sensible, that
“ she had not entirely forsaken it. Examples of this frequently occur in ancient as
“ well as in modern Authors. *Fabri* adds,
“ that in the Time of the Plague, or when
“ any other contagious or malignant Diseases rage, Physicians should advise the
“ Interment of the Dead with all possible
“ Expedition, because their Bodies, like
“ extinguished Lamps, Torches, or Flam-
“ beaux, diffuse an Odour no less disagree-
“ able than prejudicial: But such sudden
“ Interments are neither safe, nor consistent
“ with that Humanity and Compassion,
“ which ought to animate the Breasts of
“ Christians, as is obvious from the follow-
“ ing Histories.” But what is surprizing,
and even dishonourable to human Reason,
too often the Victim of some Prejudice or
other, is that *Fabri* relates these three Histories to *Crafft*, without drawing a just Conclusion from them, and even without observing, that as at other Seasons, so also in the Times of pestilential and contagious Diseases we ought not to inter Persons precipi-
tately

tately, and before we are thoroughly satisfied with respect to their Deaths.

The first of these Histories gives an Account of a Man of twenty-two Years of Age, of the Town of *Meniere*, in the Canton of *Fribourg*, who, in the Year 1566, was seiz'd with a Plague, which cut off almost the whole Family wherein he lived, and he himself being taken for dead, on the fourth Day was laid out as such. Eight Hours however after his suppos'd Death, the Persons who were putting him in his Coffin, finding that he was neither cold nor stiff, began attentively to examine the State of the Body, in which they still perceiv'd a small and languid Degree of Respiration: For this Reason they put him into a warm Bed, applied hot Bricks to his Feet, and forc'd him to swallow a small Quantiry of *Malmsey* Wine, by which Means he not only return'd to Life, but recover'd so fast, that in a Month's Time he was able to attend his usual Business. After this Accident he proved the Father of seven Children, and enjoy'd a good State of Health in the sixty-fourth Year of his Age.

The second History is that of *Reichmuth Adolch* already related.

The third is that of the Master of an Inn in the Town of *Cleves*, who, seventeen Years before he recounted the Story to *Fabri*, fell into such a Syncope, on account of an acute
and

and violent Disease, that he would have been interred for dead, if one Mr. *John Wier* had not recall'd him to Life by confining him to a warm Bed, applying Epithems * to his Wrists and the Region of his Heart, and forcing him now and then to swallow some Drops of corroborating and cordial Liquors. These Measures, however, serv'd only to divert the Company at the Expence of the Physician, till such Time as their Propriety was justified by the Recovery of the Patient.

Doctor *Crafft*, in order to make a suitable Return to his Correspondent *Fabri*, remits him the five following Histories; which, as the Facts are only subservient to our Purpose, we shall abridge as well as the rest.

Burgundy, and especially the Town of *Dijon*, was in the Year 1558 afflicted with a violent Plague, which cut off the Inhabitants so fast, that there was not Time to make a separate Grave for each dead Person; for which Reason large Pits were made, and filled with as many Bodies as they could contain. In this deplorable Conjuncture
Mrs.

* Epithems are either simple or compound Medicines externally applied, in order to produce such internal Effects as the Physician intends: These Topics are of various Kinds, such as Antifebrile, Stomachic, and Cordial, of which last Quality were these here mentioned.

Mrs. *Nicole Lentillet* shared the common Fate, and after labouring under the Disorder for some Days, fell into a Syncope so profound, that she was taken for dead, and accordingly buried in a Pit with other dead Bodies; the next Morning after her Interment she returned to Life, and made the strongest Efforts she could to get out; but her Weakness and the Weight of the Bodies with which she was covered, rendered her incapable of executing her Design. In this wretched Situation she remained for four Days, till the Grave-diggers coming to inter other Bodies, took her up and carried her to her own House, where she recovered a perfect State of Health.

The second Instance of this Nature, mentioned by Doctor *Crafft*, happened immediately before he wrote the following Account of it. A labouring Man of *Courcelles* near *Neufchâtel* fell into so profound a Syncope, that he was taken for dead; but the Persons who were putting him in his Grave without a Coffin, perceived some Motion in his Shoulders, for which Reason they carried him to his own home, where he perfectly recovered. This Accident laid a Foundation for his being called the Ghost of *Courcelles*.

A Lawyer of *Vesoul*, a Town of *Franche-Comté* near *Besançon*, so carefully concealed a Lethargy to which he was subject, that
No-

No-body knew any thing of his Disorder, tho' the Paroxysms returned very frequently. The Motives which principally induced him to this Secrecy, was the Dread of losing a Lady to whom he was just about to be married: Being afraid, however, lett some Paroxysms should prove fatal to him, he communicated his Case to the Sheriff of the Town, who, by Virtue of his Office, was obliged to take Care of him, if such a Misfortune should happen. The Marriage was concluded, and the Lawyer for a considerable Time enjoyed a perfect State of Health; but at last he was seized with so violent a Paroxysm of the Disease, that his Lady, to whom he had not revealed the Secret, not doubting of his Death, ordered him to be put in his Coffin: The Sheriff, tho' absent when the Paroxysm seized him, yet luckily returned in Time to preserve him; for he ordered the Interment to be delayed, and the Lawyer returning to Life, survived the Accident sixteen Years.

Doctor *Crafft's* fourth History is that of a certain Person who was conveyed to the Church, in order to be interred, but one of his Friends sprinkling a large Quantity of *Holy Water* * on his Face, which was uncovered,

* We must here apprise the Reader, that this Effect was produced by the *Coldness*, and not by the *Consecration* of the Water, whose genuine

covered, he not only returned to Life, but also resumed a perfect State of Health.

The fifth Instance of a Recovery from supposed Death, related by Doctor *Crafft*, is that of *James de Lavaur*, Lord of the Manor of *Boudry*, in the County of *Neufchâstel*, who being seized with a violent *Cardialgia*, fell into so profound a Syncope, that he was taken for dead: But the Physician brought to his Relief from *Fribourg* being of a contrary Opinion, blowed powdered Pepper into his Nostrils, by which Means he was not only recalled to Life, but also survived his Misfortune for a considerable Time, according to *Goulart*; from whom the following Passage is quoted by *William Fabri*, in the second Century of his Chirurgical Observations, *Obs.* 96.

“ Doctor *Crafft* subjoins other Histories
 “ of Persons who, being interr’d alive, have
 “ expir’d in their Graves and Tombs, as
 “ has afterwards been discovered by various
 “ Marks made not only in their Sepulchres, but also in their own Bodies.
 “ He in a particular Manner makes mention
 “ of a young Lady of *Auxbourg*, who
 “ falling into a Syncope, in Consequence
 “ of a Suffocation of the Matrix, was buried
 “ in a deep Vault, without being covered
 “ with Earth, because her Friends
 “ thought

Qualities can never be altered by a Rhapsody of superstitious Words.

“ thought it sufficient to have the Vault
“ carefully shut up. Some Years after,
“ however, one of the same Family hap-
“ pening to die, the Vault was open'd, and
“ the Body of the young Lady found on
“ the Stairs at its Entry, without any Fin-
“ gers on the Right Hand.”

As the Histories already related only give an Account of the Resurrection of Persons cut off by Sickneſs or Wounds, we ſhall now conſider the Fates of ſome Perſons, who have been drown'd and hang'd. Mr. *Derham* then, in the ſixth Chapter of the fourth Book of his *Phyſico-Theology*, quotes the following Hiſtory from *Rechelin, De Aere & Alim. deſect.*

“ About eighteen Years ago, a Gardner
“ of *Tronningholm*, now ſixty-five Years of
“ Age, and ſufficiently vigorous and ro-
“ buſt for one at that Period of Life,
“ made an Attempt to relieve a Perſon
“ who had fallen into the Water; but not
“ being ſo cautious as he ought, he ven-
“ tur'd upon the Ice, which broke and let
“ him fall into the Water, which at that
“ Part was eighteen Ells in Depth. He
“ went perpendicularly to the Bottom,
“ where his Feet ſtuck; and in this Situa-
“ tion he remain'd ſixteen Hours before he
“ was found. He himſelf ſays, that as ſoon
“ as he was under the Water his Body be-
“ came rigid, and loſt not only the Power
“ of

“ of Motion, but also all Sensation, except
“ that he thought he heard the Sound of
“ some Bells, which were then ringing at
“ *Stockholm*: He at first also perceiv’d, as
“ it were, a Bladder before his Mouth,
“ which hindered the Water from entring
“ by that Passage, tho’ he found it entring
“ freely into his Ears; a Circumstance
“ which produc’d a Dulness in his Hearing
“ for some Time after. He was sought
“ for in vain during sixteen Hours, till at
“ last a Hook being fixed in his Head, he
“ was by its Means taken up; and after-
“ wards said he was sensible of that Part
“ of his Fate. Whether from the Custom
“ of the Country, or the Persuasion of
“ particular Persons, Attempts were made
“ to restore him to Life: For this Pur-
“ pose he was wrapt up in Blankets, lest
“ the Air entring too precipitately into his
“ Lungs should prove fatal to him. In
“ this Condition he was gradually warm’d;
“ then being wrapt in warm Sheets, he
“ was rubb’d and tormented till the Mo-
“ tion of his Blood, which had been check’d
“ for so many Hours, return’d. At last
“ he was totally restor’d by Means of Cor-
“ dial and Anti-apoplectic Liquors. He
“ as yet bears the Mark made by the
“ Hook, and says, that he is still subject
“ to violent Pains in his Head. This sin-
“ gular Accident, attested by the Oaths of
“ Eye-

“ Eye-Witnesſes, induc’d the Queen to
“ give him an annual Penſion, and he was
“ preſented to the Prince, in order to give
“ him an Account of what had happened
“ to him.

“ Mr. *Tilafius*, Keeper of the King’s Li-
“ brary, has wrote the Hiſtory of a Woman
“ who remain’d under Water for three whole
“ Days, who was reſtor’d to Life almoſt in
“ the ſame Manner with the Gardner; and
“ who was alive when *Tilafius* wrote the
“ Account of her. To this we may add
“ the Teſtimony of Mr. *Burmann*, who
“ aſſures us, that in *Bonefs* in *Pithovia*, he
“ heard a Funeral Sermon preach’d upon
“ the Death of one *Laurence Jones*, a Man
“ of ſeventy Years of Age, who, as the
“ Preacher ſaid, was drown’d when ſixteen
“ Years old, and continued ſeven Weeks
“ in the Water; notwithstanding which
“ Accident he return’d to Life, and en-
“ joy’d good Health.

“ It is ſurprizing, continues *Rechelin*,
“ that Stories ſo well known, and ſo ſin-
“ gular in themſelves, ſhould not be con-
“ ſecrated to Immortality by the Atteſta-
“ tions of Phyſicians of Note. As I be-
“ lieve that there are a great many ſecret
“ things in Nature, and daily obſerve Ac-
“ cidents, which I before thought imposſi-
“ ble; ſo I have no Reaſon to doubt of
“ ſurprizing Facts related by ſo many Men
“ of

“ of Learning, nor formally to deny a
“ History, which at first appears incredible.”

Mr. *d'Egley*, a Member of the Royal Academy of Inscriptions, has communicated to me the Measures he took in order to preserve the Life of a certain *Swiss*, who made a good Livelihood by plunging into the Water, and thrusting himself into the Holes in which he thought the large Fishes were contained.

This adventurous *Swiss* being one Day employed to provide Fish for a Company, who intended to have a splendid Dinner, promised to furnish them with a Dish of fine Fish: His Employers accompanying him to the Brink of the River, and seeing him plunge into the Water, retired, thinking that he would not fail to keep his Word.

But when the Hour appointed for Dinner came, the *Swiss* did not appear with his Part of the Entertainment; so that when the half of the Afternoon was spent, the Company went to the River in order to know the Reason of their Disappointment: The Clothes of the Diver lying on the Brink, laid a Foundation for suspecting the Misfortune which had befallen him; accordingly they ordered him to be searched for with Hooks, in the Place into which they had seen him plunge, and at last being found,

found, he was taken out of the Water, tho' wounded in several Parts.

As the *Swiss* had been drowned for about nine Hours, the Curate of the Place, who was present, inclined that he should be forthwith interred, and he had undoubtedly been confined to the Grave, had not Mr. *d' Egly*, who saw a kind of Ebullition in the Water discharged from his Mouth, asserted that he was not dead ; for he justly attributed that Ebullition to the faint Remains of Respiration.

This Observation made a deep Impression on the Spectators, who carried him into an adjacent House, where having laid him out at full Length, they compressed his Abdomen in order to facilitate the Discharge of the Water he had swallowed ; when in about three Quarters of an Hour having discharged a considerable Quantity of Water, he moved one of his Legs, which was a sufficient Proof, that he was still alive : For this Reason he was wrapt up in warm Sheets, and gradually restored to a natural Heat ; then he was conveyed to a warm Bed, where, his Life becoming more and more conspicuous, a liberal Venesection was made, which was succeeded by a Sigh, then by a small Degree of Knowledge of what passed, and a little after by a perfect Cure.

This important Service ever after touch'd the Heart of the *Swiss* with a grateful Sense

50 The UNCERTAINTY of
of the Obligations he lay under to Mr. d'
Egley.

Mr. *Derham*, in the Part before quoted, gives us two Instances of the Resurrection of hanged Persons. The first, seen by *Pechlin*, and recorded in *Tr. de Aere & Alim. defect.* Cap. vii. is that ' of a certain Woman ' hanged, and in all Appearance dead, who ' was nevertheless restored to Life by a Physician accidentally coming in, and ordering a plentiful Administration of the Spirit ' of Sal Ammoniac.'

The other Accident of this Nature is by Mr. *Derham* related in the following Words.

' The Story of *Anne Green*, executed at ' *Oxford*, Dec. 14, 1650, is still well remembered among the Seniors there : She ' was hanged by the Neck near half an ' Hour, some of her Friends thumping her ' on the Breast, others hanging with all their ' Weight upon her Legs, sometimes lifting ' her up, and then pulling her down again ' with a sudden Jirk ; thereby the sooner to ' dispatch her out of her Pain, as the printed Account of her informs us. After she ' was in her Coffin, being observed to ' breathe, a lusty Fellow stamp't with all ' his Force, on her Breast and Stomach, to ' put her out of her Pain : But by the Assistance of Dr. *Peity*, Dr. *Willis*, Dr. *Bathurst*, and Dr. *Clark*, she was again ' brought to Life ; I myself saw her many ' Years

‘ Years after, between which Time, and the
‘ Date of her Execution, she had, as I am
‘ informed, born several Children.’

Tho’ these two Histories lay a Foundation for a Variety of Reflexions, yet we shall only observe, that in both Cases a precipitate Interment would have been Murder; and that all the Presumptions of Death are not sufficient to authorize the Neglect of such Precautions and Tests, as are proper to ascertain the real State of the Body.

Kornman, in his Treatise *De Miraculis Mortuorum*, relates the following Histories.

Saint *Augustine* from Saint *Cirille* informs us, that a Cardinal of the Name of *Andrew* having died at *Rome* in the Presence of several By-standers, was next Day conveyed to the Church, where the Pope and a Body of the Clergy attended the Funeral Service, in order to do Honour to his Memory: But to their great Surprize, after some Groans, he recovered his Life and Senses. This Event was at that Time looked upon as a Miracle, and ascribed to Saint *Jerome*, to whom the Cardinal was greatly attach’d.

The following Account seems more to resemble a Miracle, tho’ we do not find that it was looked upon as such.

Gocellinus, a young Man, and Nephew to one of the Archbishops of *Cologne*, falling into the *Rhine*, was not found for fifteen Days after; but was discovered to be

alive, as he lay before the Shrine of Saint *Suibert*.

As an Excess of Credulity is unpardonable, especially in a Physician, so I am of Opinion, that there is nothing miraculous in these two Events ; since we ought to suppose no Effects preternatural, which can be produced by Physical Causes. Now the Histories before related give us just Reason to believe, that there was nothing miraculous in these two Resurrections.

Kornman from *Galen* gives us two other Instances of the Uncertainty of the Signs of Death. The first is that of a Man seized with a Suffocation, which lasted for six Days, during the whole of which Time he continued without Eating or Drinking, and without any manifest Pulsation of his Arteries. The second is that of a certain Man, who happening to inter his Neighbour before seventy-two Hours from his supposed Death were expired, by that Precipitation proved his Murderer ; since he was really alive when he was buried as dead.

After these and many other Observations of the same Nature, it is surprizing, that *Kornman* should be at a Loss to explain, how some dead Persons devour and swallow their Shrouds in their Graves, or how the Woman mentioned in *Hondorff's Historical Theatre*, devoured herself. It is certainly more reasonable to ascribe these shocking Phenomena

Phenomena to the Despair natural to a Person interred alive, than with him to say, *That such Things cannot be accounted for ; at least, adds he, we must not with the Rabbins suppose, that the Bodies of Men are the Prey and Nourishment of the Serpent, or, to use their own Words, of Azazeli, who is the Master of Flesh and Blood, and whom God, as we find in the Book of Genesis, has condemned to eat Dust all the Days of his Life.* It is true, that by espousing this whimsical Notion, he would not have had an Opportunity of displaying his extensive Knowledge by proving that human Bodies are only Dust and Earth ; a Proposition which no Doubt called for an elaborate Dissertation, in order to convince the Incredulous.

But as Distance of Time and Remoteness of Places are Circumstances which generally render Facts less striking and satisfactory, than otherwise they would be, we shall enumerate some Instances of the Uncertainty of the Signs of Death, which have happened in our own Times and in our own Country.

The first Example we shall mention of this Kind then, is that of a certain Canon of *Bourges*, who returning to Life whilst the Funeral Service was performing over him in the Metropolitan Church, was carried home to his own House, and perfectly cured of the Disorder, which was thought to have

cut him off. He survived this Accident a long Time, and was promoted to be Official of the Diocess of *Paris*.

The second Accident of this Nature happened at *Toulouse*; for a Lady being interred in the Church of the *Jacobines* with a Diamond Ring on one of her Fingers; a Servant of her own Family, concealing himself in the Church, when Night came on, went down into the Vault in which the Coffin was laid; but upon opening the Coffin he found, that the Swelling of the Finger hindered the Ring from slipping easily off, for which Reason he began to cut it. Upon this, the Pain extorting a Shriek from the supposed dead Lady, the Domestic was seized with such Terror and Consternation, that he fell into a Deliquium. The Lady in the mean Time continuing to bewail her wretched Situation, till the Hour appointed for Morning Prayers arrived, was luckily overheard by some devout Persons, who, guided by the Voice, descended into the Vault, where they found the Lady sitting on a Seat, and the Domestic lying by her half-dead. Upon this they run forthwith to awake the Husband, who ordered her to be brought home, where she perfectly recovered from her Disorder. The Indisposition however of the Servant was so violent, that he could not be recalled to Life, but died in

in twenty-four Hours after having accidentally preserved the Life of his Mistress.

This is not the single Instance of precipitate Interments, which have happened in the Town of *Toulouse*; for I have in my own Possession the following Certificate, wrote and signed by Mr. *Blau*, a Native of *Auvergne*, and a Man of untainted Veracity.

‘ I hereto subscribing declare, that fifty-
 ‘ five Years ago, happening to reside at
 ‘ *Toulouse* for the sake of my Studies, and
 ‘ going to St. *Stephen*’s Church to hear a
 ‘ Sermon, I saw a Corpse brought thither
 ‘ in order to be interred: The Ceremony
 ‘ however was delayed till the Sermon
 ‘ should be over; but the supposed dead
 ‘ Person being laid in a Chapel, and at-
 ‘ tended by all the Mourners, about the
 ‘ Middle of the Sermon discovered mani-
 ‘ fest Signs of Life; for which Reason he
 ‘ was quickly conveyed back to his own
 ‘ House: So that from a Consideration of
 ‘ Circumstances it is sufficiently obvious,
 ‘ that without the Intervention of the Ser-
 ‘ mon the Man had been interred alive.

Paris, April
 27, 1740.

BLAU.

Mr. *Mozet*, Letter-Founder in *Paris*, has given me an Account of the three following Accidents which happened at *Rheims*, the Place of his Nativity.

This Gentleman's Grandmother happening to be at her Prayers near the Coffin of one of her deceased Neighbours, heard a certain Noise, made, as she thought, by some Motion within the Coffin; upon which she told a Clergyman, that the Woman was not dead. The like Noise being heard by some other Persons, who had been informed of what Mrs. *Mozet* had said, the Coffin was opened, and the supposed dead Woman found alive. It is about seventy Years since this Accident happened.

A young Girl, the Daughter of a Tradesman, of the Name of *Gouge*, being conveyed to *God's Hospital*, and supposed to be really cut off by the Disorder for which she was brought thither, happily discovered the Signs of Life at the very Time she was on the Bier destined for carrying her Body to the Grave. After this Accident, which happened about twenty-five Years ago, she was not only cured of her Indisposition, but also entered into a Marriage State. This Fact can be as yet attested by her Sister, *Jean Gouge*, a Laundress in the Street called *Arbaletre*, in the Suburbs of Saint *Marcel*.

About thirty-eight Years ago, a Woollen Draper of the Name of *Huffon*, having put his Son to a Nurse, who lived pretty near *Rheims*, was soon after surprized with the melancholy News of the Child's Death. But

as he was resolved to have the Evidence of his own Senses for a Fact in which he was so nearly interested, he made the best of his Way to the Place where his Son lay ready to be interred, and ordering the Coffin to be opened, found him not only alive, but also so vigorous, that he survived the Accident twenty Years.

Mr. *Mozet* also informed me, that other Accidents of the same Nature had happened at *Rheims*; and it must be owned, that the unaccountable Precipitation with which Interments are generally performed, renders what he said more than probable. Now, if a Multiplicity of Instances evince, that many have had the good Fortune to escape being interred alive, it is justly to be suspected, that a far greater Number have fallen Victims to a fatal Confinement in their Graves. But human Nature is such a Slave to Prejudice, and so tied down by the Fetters of Custom, that it is highly difficult, if not absolutely impossible to put People on their Guard against such terrible Accidents, or to persuade those vested with public Authority to take proper Measures for preventing them.

The following Accidents happened at *Paris*, and are strong collateral Proofs of the Uncertainty of the Signs of Death. A Person of Distinction being seized with a Disorder which is daily cured, though it is

The UNCERTAINTY of mortal in its own Nature, but always discovers approaching Death by previous Signs, was committed to the Care of a Physician of the Faculty, who at Night left his Patient in Danger, though not without Hopes of seeing him once more alive. Upon his calling next Day, however, he was told that he was not only dead, but also laid out as such: The Physician, by no Means startled at this, affirmed, that it was absolutely impossible he could be dead, and accordingly ordered the Cloth with which his Face was covered, to be untied, and his Body to be laid in Bed, which Measures, in Conjunction with the Assistance of proper Remedies, justified the Assertion of the Physician, since the Patient not only recovered from the violent Syncope which had imposed on the By-standers, but also lived several Years after the Misfortune.

A Woman of the Name of *Aubert*, who lived in the Street called *Chartiere*, at the Image of St. *Sebastian*, happening to be excessively enraged at one of her Children, fell into a Syncope so profound, that she was not only thought dead, but also put in her Coffin, and laid before the Door of the House: A Woman of the Neighbourhood however, imagining it impossible that *Aubert* was really dead, prevailed upon the People of the Family to take the Coffin up Stairs again, and open it in the Presence of

of a Physician and Surgeon, the latter of whom, as I am informed, was called *Chauvet*. Upon executing this Design, the Body of *Aubert* was found all over warm, and her Countenance of a fresh and blooming Colour: The Physician considering these Circumstances affirmed, that she had not been dead an Hour, and that probably her now irretrievable Fate might have been prevented by Venesection in the Beginning of her Syncope.

A Porter who lived in the Street *des Lavandiers*, falling sick, was conveyed to the *Hôtel Dieu*, where, being soon after taken for dead, he was laid in a Grave along with some other Persons who had died in the same Hospital; but returning to Life about Eleven o'Clock at Night, he tore the Cloth with which his Face was covered, got out of his Grave, and knocked at the Porter's Lodge, where he readily found Admission.

Mrs. *Langlois*, Wife to an Engraver and Image-maker in Saint *James's-Street*, near the Street *de la Parcheminerie*, was laid out for dead, put in her Coffin, and conveyed to the Church: But during the Funeral Service some Persons perceiving a Motion in the Coffin, opened it, and found the Woman not only alive, but so vigorous and strong, that she lived a long time after.

About twelve or thirteen Years ago, a poor Woman, who lived in the Street *de Boucheries*,

Boucheries, in the Suburbs of *St. Germain's*, was taken for dead, and laid out as such, with a Wax-Candle lighted at her Feet, as is usual on the like Occasions. Some young Persons however happening to watch her, were fonder of diverting themselves than of bewailing the Death of their Acquaintance; accordingly, in the Course of their Mirth, they overturned the Wax-Candle on the Straw-bed on which the Woman lay: The Bed being dry, took fire so suddenly, that they could not preserve her from the Flames, the Violence of which extorted an hideous Shriek from her. We may readily suppose, that an Accident so unexpected, put an End to the Mirth of the young People, who all made their Escape in the best Manner they could: But some Persons hearing the repeated Shrieks of the Woman, came to her Assistance, snatched her from the Straw-bed, stopt the Progress of the Burning, and put her in a Bed. She then complained of an excessive Cold; for her Misfortune happened in Winter; but being duly warmed and properly treated, she recovered so thoroughly, that she has brought several Children into the World since her Resurrection.

Among the great Variety of Accidents of the like Nature that have happened in *Great Britain*, I shall only at present relate the following.

At

At *Basingstoke* in *Hampshire*, not many Years ago, a Gentlewoman of Character and Fortune was taken ill, and to all Appearance died, while her Husband was on a Journey to *London*. A Messenger was forthwith dispatched to the Gentleman who returned immediately, and ordered every thing for her decent Interment. Accordingly, on the third Day after her supposed Decease, she was buried in *Holy Ghost* Chapel at the Outside of the Town, in a Vault belonging to the Family, over which there is a School for poor Children, endowed by a charitable Gentleman in the Reign of *Edward VI*. It happened the next Day, that the Boys, while they were at Play, heard a Noise in the Vault, and one of them ran and told his Master, who not crediting what he said, gave him a Box on the Ear, and sent him about his Business; but upon the other Boys coming with the same Story, his Curiosity was awakened, so that he sent immediately for the Sexton, and opened the Vault and the Lady's Coffin, where they found her just expiring. All possible Means were used to recover her to Life, but to no Purpose; for she in her Agony had bit the Nails off her Fingers, and tore her Face and Head to that Degree, that notwithstanding all the Care that was taken of her, she died in a few Hours in inexpressible Torment.

The

The following Story is related by one Mr. *William Tossach*, a Surgeon at a Place called *Alloa* in *Scotland*, which I shall give in his own Words, as the Reader may find them in the *Edinburgh Medical Essays*, Vol. V. p. 605.

‘ November 11th, 1732, early in the Morning, an usual Steam was observed to come out of a Coal-pit in this Neighbourhood, belonging to the honourable Sir *John Schaw* of *Greenock*, which the People who went down to enquire the Cause of it, found to be the Smoak of Coals that lay about ten Fathoms from the Bottom of the Pit, and were some Way or other set on Fire in two Places. This Pit, and all the others which had any Communication with it, were shut up close, to smother the Flame, and continued thus shut till *December 3d*, when they were all opened. The one, where the Fire had been, sent out a most nauseous Steam, so that No-body could come near it, except to the Windward. After some Hours the Colliers and others ventured down by the Ladders into this Pit, which was thirty-four Fathoms deep; but soon came running up, all panting and breathless; they that came latest, being scarce able to speak so much as to tell that one of their Number, *James Blair*, was left dead.

‘ Two Men who were no Colliers offered
‘ soon after to go down, and others, ani-
‘ mated by their Example, accompanied
‘ them, and brought up the poor Man by
‘ Head, Shoulders, Legs, or Arms; their
‘ Hurry was so great, they did not think
‘ how they carried him. When he came
‘ to the Mouth of the Pit, which was be-
‘ tween half an Hour and three quarters
‘ after he had been left in the Bottom of it;
‘ two had him by the Arms, and two by
‘ the Feet, with his Back uppermost. I
‘ made them immediately set him down at
‘ a little Distance from the Pit, turning him
‘ supine. The Colour of the Skin of his
‘ Body was natural, except where it was
‘ covered with Coal-dust; his Eyes were
‘ staring open, and his Mouth was gaping
‘ wide; his Skin was cold; there was not
‘ the least Pulse in either Heart or Arteries,
‘ and not the least Breathing could be ob-
‘ served: So that he was in all Appearance
‘ dead. I applied my Mouth close to his,
‘ and blowed my Breath as strong as I
‘ could, but having neglected to stop his
‘ Nostrils, all the Air came out at them;
‘ wherefore, taking hold of them with one
‘ Hand, and laying my other on his
‘ Breast at the left Pap, I blew again my
‘ Breath as strong as I could, raising his
‘ Chest fully with it, and immediately I
‘ felt six or seven very quick Beats of the
‘ Heart;

Heart ; his *Thorax* continued to play,
and the Pulse was felt soon after in the
Arteries. I then opened a Vein in his
Arm, which, after giving a small Jet,
sent out the Blood in Drops only, for a
quarter of an Hour, and then he bled
freely. In the mean Time I caused him
to be pulled, pushed and rubbed, to assist
the Motion of his Blood as much as I
could, washed his Face and Temples with
Water, and rubbed *Sal volatile* on his
Nose and Lips. Though the Lungs con-
tinued to play, after I had first set them
in Motion, yet, for more than half an
Hour, it was only as a Pair of Bellows
would have done, that is, he did not so
much as groan, and his Eyes and Mouth
remained both open.

After about an Hour he began to
yawn, and to move his Eye-lids, Hands
and Feet ; I then put Water, in which
I had dropt some *Sal volatile* into his
Mouth, which he swallowed, and caused
him to be carried into a House hard-by,
where I set him in a Chair reclining
backward. In an Hour more he came
pretty well to his Senses, and could take
Drink, but knew nothing of all that had
happened after his lying down at the Foot
of the Ladders, till his awaking as it were
in the House.

Within

‘ Within four Hours he walked home,
‘ and in as many Days returned to his Work,
‘ but complained for a Week or two of a
‘ violent Pain in his Back, which I believe
‘ was owing to the Way of carrying him up
‘ out of the Pit.

‘ Lady *Schaw*, Mr. *Bruce* of *Kennet*, and
‘ the Reverend Mr. *Thomas Turner*, and
‘ several other Gentlemen, with three or
‘ four hundred People of the Neighbour-
‘ hood, were Witnesses to what I have now
‘ related.

‘ I must submit to better Judges to deter-
‘ mine whether the Experiment I made use
‘ of was the Means of saving the Man’s Life
‘ on whom it was tried; it is at least very
‘ simple, and absolutely safe, and therefore
‘ there can be no Harm, if there is not an
‘ Advantage, in making it publick.’

Dr. *Cheyne*, in his *English Malady*, p.
307, gives us the following surprizing and
singular Case, which very well deserves a
Place here, as it cannot fail of being very
entertaining to the Reader. We shall make
use of the Doctor’s own Words.

‘ Colonel *Townshend*, a Gentleman of
‘ excellent natural Parts, and of great Ho-
‘ nour and Integrity, had for many Years
‘ been afflicted with a Nephritick Com-
‘ plaint, attended with constant Vomitings,
‘ which had made his Life painful and mise-
‘ rable. During the whole Time of his Ill-
‘ ness,

ness, he had observed the strictest Regimen, living on the softest Vegetables and lightest Animal Foods, drinking Asses Milk daily, even in the Camp; and for common Drink *Bristol* Water, which, the Summer before his Death, he had drank on the Spot. But his Illness increasing, and his Strength decaying, he came from *Bristol* to *Bath* in a Litter, in Autumn, and lay at the *Bell-Inn*. Dr. *Baynard* and I were called to him, and attended him twice a Day for about the Space of a Week, but his Vomitings continuing still incessant, and obstinate against all Remedies, we despaired of his Recovery. While he was in this Condition, he sent for us early one Morning; we waited on him, with Mr. *Skrine* his Apothecary; we found his Senses clear, and his Mind calm, his Nurse and several Servants were about him. He had made his Will, and settled his Affairs. He told us, he had sent for us to give him some Account of an odd Sensation he had for some Time observed and felt in himself; which was, that composing himself, he could die or expire when he pleased, and yet by an Effort, or some how, he could come to Life again; which it seems he had sometimes tried before he had sent for us. We heard this with Surprise; but as it was not to be accounted for

from

‘ from now common Principles, we could
‘ hardly believe the Fact as he related it,
‘ much less give any Account of it; unless
‘ he should please to make the Experiment
‘ before us, which we were unwilling he
‘ should do, lest in his weak Condition,
‘ he might carry it too far. He continued
‘ to talk very distinctly and sensibly above
‘ a quarter of an Hour about this (to him)
‘ surprizing Sensation, and insisted so much
‘ on our seeing the Trial made, that we
‘ were at last forced to comply. We all
‘ three felt his Pulse first: It was distinct,
‘ though small and thready; and his Heart
‘ had its usual Beating. He composed
‘ himself on his Back, and lay in a still
‘ Posture some Time; while I held his
‘ right Hand, Dr. *Baynard* laid his Hand
‘ on his Heart, and Mr. *Skrine* held a clean
‘ Looking-Glass to his Mouth. I found
‘ his Pulse sink gradually, till at last I
‘ could not feel any, by the most exact
‘ and nice Touch. Dr. *Baynard* could not
‘ feel the least Motion of his Heart, nor
‘ Mr. *Skrine* the least Soil of Breath on the
‘ bright Mirror he held to his Mouth;
‘ then each of us by Turns examined his
‘ Arm, Heart, and Breath, but could not
‘ by the nicest Scrutiny discover the least
‘ Symptom of Life in him. We reasoned
‘ a long Time about this odd Appearance

as well as we could, and all of us judging it inexplicable and unaccountable; and finding he still continued in that Condition, we began to conclude that he had indeed carried the Experiment too far, and at last were satisfied he was actually dead, and were just ready to leave him. This continued about half an Hour, by Nine o'Clock in the Morning, in *Autumn*. As we were going away, we observed some Motion about the Body, and upon Examination, found his Pulse and the Motion of his Heart gradually returning: He began to breathe gently and speak softly: We were all astonished to the last Degree at this unexpected Change, and after some further Conversation with him, and among ourselves, went away fully satisfied as to all the Particulars of this Fact, but confounded and puzzled, and not able to form any rational Scheme that might account for it. He afterwards called for his Attorney, added a Codicil to his Will, settled Legacies on his Servants, received the Sacrament, and calmly and composedly expired about five or six o'Clock that Evening. Next Day he was opened, (as he had ordered;) his Body was the soundest and best made I had ever seen; his Lungs were fair, large and sound, his Heart big and strong,

' strong, and his Intestines sweet and clean ;
 ' his Stomach was of a due Proportion, the
 ' Coats sound and thick, and the villous
 ' Membrane quite entire. But when we
 ' came to examine the Kidneys, though
 ' the Left was perfectly sound and of a just
 ' Size, the Right was about four Times as
 ' big, distended like a blown Bladder, and
 ' yielding as if full of Pap ; he having
 ' often passed a wheyish Liquor after his
 ' Urine, during his Illness. Upon open-
 ' ing this Kidney, we found it quite full of
 ' a white chalky Matter, like *Plaster of*
 ' *Paris*, and all the fleshy Substance dis-
 ' solved and worn away, by what I called
 ' a Nephritick Cancer. This had been the
 ' Source of all his Misery ; and the sym-
 ' ptomatick Vomitings from the Irritation
 ' on the consentient Nerves, had quite
 ' starved and worn him down. I have
 ' narrated the Facts, as I saw and observed
 ' them deliberately and distinctly, and
 ' shall leave to the Philosophick Reader to
 ' make what Inferences he thinks fit ; the
 ' Truth of the material Circumstances I will
 ' warrant.'

Though I had resolved to confine my-
 self to the Narratives hitherto related, yet
 the Singularity and Truth of the follow-
 ing Histories, whose most essential Circum-
 stances I shall only recount, will sufficiently
 apologize

apologize for the Insertion. The first occurs in the eighth Volume of *Causes celebres & interessantes*, where it is told without a Date, but cloathed with a Train of such moving Circumstances, that it cannot fail at once to convince the Judgment of an important Truth, and warm the Heart with the most noble Sentiments of Friendship and Humanity.

Two Merchants living in the Street of *Saint Honorius*, were connected with each other by the most sacred and inviolable Ties of Friendship, possessed of equal Fortunes, and concerned in the same Branch of Trade. The one had a Son, and the other a Daughter, nearly of the same Age. The first Sentiments which made the Daughter sensible that she was capable of Love, also convinced her that her Heart belonged to the Son, who in his Turn was no less attached to her. This reciprocal Inclination was encouraged and kept up by frequent Visits, authorised by both Fathers, who with Pleasure observed the Dispositions of their Children exactly suited to the Intention they had of rendering them Husband and Wife. Accordingly, a Marriage was just about to be concluded between them, when a rich Collector of the King's Revenues made his Addresses to the young Lady as a Lover. The delusive Charms of a superior

perior Fortune soon induced her Parents to change their Resolution with respect to their Neighbour's Son; and the Lady's Aversion to her new Lover being surmounted by her filial Duty, she married the Collector, and, like a virtuous Woman, discharged the young Gentleman whom she loved from ever seeing her again. The Melancholy brought on by an Engagement so fatal to her Happiness, threw her into a Disorder in which her Senses were so locked up, that she was taken for dead, and interred as such.

We may readily suppose that her first Lover was not the last Person who heard the melancholy Accounts of this Accident. But as he remembered that she had, before been seized with a violent Paroxysm of a Lethargy, he flattered himself that her late Misfortune might possibly be produced by the same Cause. This Opinion not only alleviated the Excess of his Sorrow, but, also, induced him to bribe the Grave-Digger, by whose Assistance he raised her from her Tomb, and conveyed her to a proper Chamber, where, by the Use of all the Expedients he could possibly imagine, he happily restored her to Life.

The Lady, probably, was in no small Consternation when she found herself in a strange House, saw her darling Lover sitting by her Bed, and heard the Detail of all that had

had befallen her during her lethargic Paroxysm. It was no hard Task to make her entertain a grateful Sense of the Obligations she lay under to her Deliverer. The Love she had always bore him, proved a moving and pathetic Orator in his Behalf; so that when she was perfectly recovered, she justly concluded that her Life belonged to him who had preserved it; and to convince him of her Affection, went along with him into *England*, where they lived for several Years, superlatively happy in all the tender Endearments of mutual Love.

About ten Years after, however, they went to *Paris*, where they lived without any Care to conceal themselves, because they imagined that No-body could ever suspect what had happened. But as Fortune is too often an implacable Enemy to the most sincere and rapturous Love, the Collector unluckily met his Wife in a public Walk; where the Sight of her well-known Person made such a strong Impression on his Mind, that the Persuasion of her Death could not efface it: For this Reason, he not only accosted her, but also, notwithstanding the Discourse she used in order to impose upon him, parted from her fully persuaded that she was the very Woman to whom he had been married, and for whose Death he had gone into Mourning.

As the whimsical Nature of this Event clothed the Lady with a Set of Charms, which

which the Collector never before imagined her to be Mistress of, he not only discovered her Apartments at *Paris*, in Spite of all the Precautions she had taken to conceal herself, but also claimed her as his Spouse before the Court authorized to decide in similar Cases.

In vain did the Lover insist upon the Right he had *to her*, resulting from the Care he had taken *of her*. To no Purpose did he represent, that without the Measures taken by himself the Lady would have been rotting in her Grave; that his Adversary had renounced all Claim to her by ordering her to be interred; that he might justly be arraigned as a Murderer for not using the Precautions necessary to ascertain her Death, and a thousand other Reasons suggested by Love, which is always ingenious, where it is sincere. But perceiving that the Court was not like to prove favourable to him, he resolved not to stay for its Decision, and accordingly made his Escape along with the Lady to a foreign Climate, where their Love continued sacred and entire till Death conveyed them to those happy Regions, where Love knows no End, and is confined within no Limits.

The following Accident, tho' accompanied with less affecting Circumstances, is yet an equally strong Proof of the Uncertainty of the Signs of Death, and equally

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authentic;

authentic; for I have the Account of it from the before-quoted Mr. *d'Egly*, who has heard the greatest Part of it about thirty Times related by the very Woman to whom it happened.

Mr. *Devaux*, a Master-Surgeon of Saint *Cosme*, who lives in Saint *Antony's-Street*, had in his Family two Servant-Maids, one of whom, called *Mary Isabeau*, was three Times carried from her home in order to be interred, and the third Time did not discover that she was alive, till the Bearers were letting her down into the Grave. The Habit, however, she had contracted of counterfeiting the State of the Dead, in order to impose on the Judgment of the Living, inspired her Friends and Acquaintance with so much Diffidence, that when she really died, they were unwilling to run the Risk of a fourth Mistake; for preventing which they kept her six Days before they interred her.

Bhonius, in the first Dissertation of the Appendix to his Treatise of the Reports concerning mortal Wounds, relates the two following Facts.

In the Year 1619, a young Woman, who was no Model of Chastity, had the Misfortune to bring a Daughter into the World in a Meadow near *Torgaw*. In order to conceal the Infamy of her Character from the Public, she interred the Fruit of her Body alive: But the Judge being informed

formed of her Crime, ordered the Grave to be opened, where the Infant was found alive. This Fact is sufficiently vouched by the criminal Process raised against the Mother on that Account.

An Accident of a similar Nature happened in the Year 1674; for two young Persons, whose criminal Amours had rendered them the Parents of a Daughter, wrapt her up in Linen and Woollen Cloths, and interred her in a Pit about a Foot deep made in a Barn: After throwing a little Earth over the Body, they covered it with some Bottles of Oat-Straw, imagining that these Precautions were sufficient to secure the Honour of the Mother. But the flagrant Crime was soon discovered, and the Infant who had suffered so much from a false Point of Honour, raised alive, seven Hours after its Interment; by which unexpected Circumstance the Parents were freed at once from the Imputation of Murder, and the Punishment due to that barbarous Crime.

These inhuman Parents, who had, as they thought, exposed their own Offspring to inevitable Death, and consequently committed Murder, in the strictest Sense of the Word, ought no doubt to have fallen unlamented Victims to impartial Justice, and only owed their Lives to a Defect of Rigour, or rather a Want of Equity in the Laws of their Land.

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But as moral Reflexions do not belong to the Province of a Physician, I shall 'confine myself to the physical Consequences which may be justly drawn from these Histories.

From these Facts then, it is sufficiently obvious, that a Person may live for several Hours without Respiration, since in the second Accident the Infant was found alive seven Hours after its Interment. And tho' *Bbonius* does not specify how long the Infant mentioned in the first Narrative was confined to its Grave; yet it is highly probable, that it must have remained considerably longer in that wretched Situation, since, before a Report could be given in, before the Judge could run thro' all the Formalities requisite on such Occasions, and before the necessary Searches could be made, more than seven Hours must necessarily have passed. And what renders this Conjecture still more probable, is, that by precipitating their Procedure, they could hardly suppose they could come in time enough to rescue the Infant from its Grave with any Degree of remaining Life. We have, therefore, just Reason to believe that the first Infant was interred longer than the second, and may consequently ask, why a Person may not live the double of that Time in the like Situation? Such a Progression would carry us farther than we, perhaps, imagine; since the Conditions necessary to the Preservation of Life
are

are hitherto a Mystery, which, for ought we know, will never be cleared up.

Numerous Histories of similar Resurrections might be collected : But either the Curious or Incredulous may, for their farther Satisfaction, have Recourse to the Medicinal Observations of *Forestus*, those of *Amatus Lusitanus*, the Chirurgical Observations of *William Fabri*, the Treatise of *Levinus Lemnius* on the secret Miracles of Nature, the Observations of *Schenkins*, the Medico-Legal Questions of *Peter Zacchias*, *Albertinus Bottonus*'s Treatise of the Disorders of Women, *Terilli*'s Treatise on the Causes of sudden Death, *Lancisi*'s Treatise concerning sudden Deaths, and *Kornmann*'s Treatise on the Miracles of the Dead : But tho' these Authors furnish us with a great Variety of the most palpable and flagrant Instances of the Uncertainty of the Signs of Death, yet I cannot help relating two Accidents which happened, the one to *Vesalius*, and the other of a nearly similar Nature to another celebrated Anatomist.

(2.) *Andreas Vesalius*, successively first Physician to *Charles the Fifth*, and his Son *Philip the Second* of Spain, being persuaded that a certain Spanish Gentleman, whom he had under his Management, was dead, ask'd Liberty of his Friends to lay his Body open. But his Request being granted, he had no sooner plung'd his Dissecting-Knife in the

Body, than he observed the Signs of Life in it; nor could he be mistaken in this Conjecture, since upon opening the Breast, he saw the Heart palpitating. The Friends of the Deceas'd, prompted by the Horror of the Accident, not only pursued *Vesalius* as a Murderer, but also accus'd him of Impiety before the Inquisition. As the Fact was notorious, the Judges of that unrelenting Tribunal inclined that he should suffer as a Murderer. By the Authority, however, or rather by the Intreaties of the King of *Spain*, he was rescued from the threatening Danger, on Condition he would expiate his Crime by undertaking a Voyage to the *Holy Land*. Upon the Death of *Fallopins*, the Senate of *Venice* invited him to succeed that great Anatomist. With this View he embarked, but was in his Voyage, thrown, by a violent Storm, into the Island of *Zante*, where having wandered some Days in the Desarts, and suffered the last Extremities of Hunger, he at last died in a deplorable Manner for want of Relief, on the 15th of *October* 1564, and in the fifty-eighth Year of his Age.

The Account of the Accident which befell the other Anatomist, is taken from *Terrilli*, and runs thus.

A Lady of Distinction in *Spain*, being seized with an hystERIC Suffocation, so violent, that she was thought irretrievably dead, her

her Friends employ'd a celebrated Anatomist to lay open her Body, perhaps with a Design to discover the Cause of her Death. Upon the second Stroke of the Knife she was rous'd from her Disorder, and discovered evident Signs of Life by her lamentable Shrieks, extorted by the fatal Instrument. This melancholy Spectacle struck the By-standers with so much Consternation and Horror, that the Anatomist, now no less condemn'd and abhorr'd, than before applauded and extoll'd, was forthwith oblig'd to quit not only the Town, but also the Province in which the guiltless Tragedy was acted. His Escape was necessary, not only to prevent the Reproaches with which he was loaded, but also to preserve his Life, now expos'd to Danger rather by his Misfortune than by his Fault. But though he quitted the now disagreeable Scene of the Accident, a groundless Remorse prey'd upon his Soul, till at last a fatal Melancholy put an End to a Life whose Calamities could only terminate with itself.

As Accidents of this Nature are not only melancholly in themselves, but also productive of the worst of Consequences to those in whose Hands they happen, so we cannot use too many Precautions in convincing ourselves of the Death of any Person, before we attempt the opening of his Body; for it is not to be supposed, that two so ce-

celebrated Anatomists as these now mentioned plunged their Knives in the Bodies of the supposed dead Persons without a sufficient previous Scrutiny ; nor is it at all probable that *Vesalius*, who attended the *Spanish* Gentleman through all the Stages of his Disorder, wanted Reasons to believe him dead, both from the prognostic and diagnostic Signs of that State ; and if that great Man was imposed upon by these Signs, it is but modest and reasonable we should not confide too boldly in their Certainty. I shall not, however, derogate too much from these Signs, nor divest them of those Advantages which really belong to them. “ I know, says *Celsus*, that if future Death is to be foretold by certain Signs, some may ask how it comes about, that Patients given over as dead by their Physicians, sometimes recover, and that some have even returned to Life in the very Time of their Funerals ?”

Before I give a direct Answer to this Objection, it is proper to observe, that a Patient given over by his Physicians is only a Subject in whom is observed an unlucky Concurrence of the Signs, which prognosticate a quick approaching Death ; for so long as there are any Remains of Hope, it is not only the Duty, but also the Honour and Interest of the Physician, to afford his Assistance cheerfully. *Celsus* however fully
answers

answers the Objection in the following Manner :

“ Medicine is a conjectural Art, and such
“ is the Nature of Conjecture in general,
“ that what succeeds most frequently, may
“ yet prove fallacious in particular Instances.
“ It is therefore by no Means reasonable
“ absolutely to divest that of Credibility,
“ which hardly proves fallacious once
“ in a thousand Times ; since there is no
“ Comparison between the Success and the
“ Error. What I assert is not only applicable
“ to the Signs of Death, but ought
“ also to extend to Marks and Prognostics
“ of the salutary Kind ; for Hopes are
“ sometimes deceitful, and those Patients
“ frequently die, for whose Lives the Physician
“ would have answered in the Beginning
“ of their Disorders.” ——— But it is
certain, (*which ought to be carefully adverted to*) that the Signs of Recovery or Death, are
far more fallacious and defective in Acute,
than in Chronical Disorders *

It is not without Reason, that I intreat
the Reader to pay a due Regard and At-

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tention

* Acute Disorders are such as of their own Natures terminate speedily either in the Death or Recovery of the Patients, as Defluxions of the Breast, Pleurifies, and Small-Pox ; whereas Chronical Disorders are such as of their own Natures continue a long Time on Account of the Obstinacy of their Causes, as a Dropsy, a Scurvy, and a Palsy.

tention to the Observations of *Celsus*; since the Patients whose Histories we have already related, may be said to have been cut off by acute Disorders; for tho' some of them have been attacked by Diseases habitual, and consequently chronical of their own Natures, such as the Hysteric Suffocations; yet these Indispositions have Intermissions so perfect, or Remissions so considerable, that every one of their Paroxysms ought to be looked upon as a particular Disease, which, considered in this Point of Light, is certainly an acute Disorder. This Truth is so evident, that every one who has but the least Acquaintance with the Healing Art, makes an infinite Difference between these habitual Disorders which return by Paroxysms, and a Phthisis produced by an Ulcer of the Lungs, or a Dropsy brought on by an Obstruction of the Viscera. And a Person must even be a sagacious thinking Physician before he can know the Reason why these different Disorders are classed among those of the chronical Kind.

(3.) If Persons are rarely interr'd alive, they still more rarely have the good Fortune to be taken from their Graves before it is too late. But as Life is of inestimable Value, it is necessary we should propose the Measures proper for recalling to Life, or rather to a durable Life, those taken from their Graves, tho' during a whole Century, or a still longer
Tract

Tract of Time, we should only preserve a single Person, or tho' we should only be able by these Measures to prolong Life for some Hours; since judicious Persons are sensible, that a few Hours of additional Life are sometimes of the last Importance, both with respect to the Concerns of this World and that which is to come.

On Supposition then, that a Person was taken from the Grave, the Coffin, the Water, or from any other Situation in which the Defect of respirable Air should necessarily produce a Suffocation, it would be no better than murdering him, suddenly to expose him to the entire Action of the Atmosphere, for that Fluid entering precipitately into the Thorax, produces in the Vessels of the Lungs a Dilatation, which, instead of facilitating the Passage of the Blood through that Organ, produces a fresh Obstruction in it; because the Action of the Heart is not strong enough to surmount the Resistance which the Air makes to the Passage of the Blood: And this must the more inevitably happen, because the Lungs in such a State become flaccid, which is the unavoidable Fate of all Fibres deprived of the Influx of the Spirits, which necessarily depends on the free Passage of the Blood through the whole Body, and the Velocity of its circular Motion. The Precaution, therefore, mentioned by *Pecklin*, of wrapping Persons taken from the

the Water in Blankets, is highly proper, and excellently suited not only to this Species of Suffocation, or Privation of Respiration, but also to all others, as is obvious from the Example of the *Franciscan*, whose Fate laid a Foundation for these Observations.

But it is not sufficient to guard such Persons against the rude Impressions of the Air, since it is also requisite they should only be permitted the free Use of that Fluid by Degrees.

As the Decrease of the Circulation is necessarily succeeded by a proportionable Diminution of Heat, so it is justly to be expected, the Bodies of Persons suffocated, or deprived of Respiration, have lost the greatest Part of that Warmth, which is so necessary to the Support of Life: For this Reason it is absolutely necessary they should be warmed. But it would be equally pernicious suddenly to expose them at once to the Fire, or precipitately to exhibit Medicines, which by the Volatility of their Principles might produce a Rarefaction of the Blood. It is far more safe and prudent to begin by gradually augmented Frictions of the Extremities with warm Cloths, than all at once to expose such Persons to the Fire, or call in the Assistance of volatile Medicines, both of which may be safely though gradually used, when the Circulation is so restored,

restored, that their bad Effects are no longer to be feared.

These Precautions are founded on a physical Reason, which tho' sufficiently known to Physicians, may yet afford new Pleasure and Entertainment to Readers of another Class.

The Blood of the *Vena Cava* discharges itself into the right Auricle of the Heart, whose Contraction forces it into the right Ventricle, which in its Turn contracting itself, propells the Blood into the pulmonary Artery. That these Operations may be performed, it is necessary the Quantity of Blood discharged into the right Auricle should not overpower its Action, that the contractile Force of the right Ventricle should be sufficient to propel the Blood into the pulmonary Artery, and that in this Artery there should be nothing to obstruct or oppose the Distribution of the Blood which ought to be made in it. Now, according to this Doctrine, the Contraction of the right Auricle and Ventricle are in such Cases extremely weakened, since these Muscles partake of the Relaxation of all the System of the Fibres; and we have elsewhere shewn, that the Lungs are collaps'd, and consequently oppose the free Circulation of the Blood, or its free Distribution through themselves. If, therefore, in affording Assistance to Persons in this wretched Situation, we should precipitately

pitately convey too quick a Motion to the Blood, we should by that very Procedure produce invincible Obstacles to its Circulation, and consequently make the Means of recalling Life subservient to the Production of irretrievable Death; for the excessive Quantity of Blood which enters the right Auricle, will overpower and surmount the weak Force which resists it. Besides, though this Auricle had contractile Force enough to convey the Blood into the Heart; yet the Action of that Muscle will not be sufficient to propel the Blood into the Lungs, or at least to surmount the joint Resistance made by the collapsed State of the Lungs, and the Air compressing their Blood-Vessels. The Precautions, therefore, we have proposed, are not only highly proper and expedient, but also absolutely necessary and indispensable.

It is needless to observe, that when the Circulation begins to be carried on freely, we may reduce it to its natural State by means of Cordials and anti-apoplectic Remedies; though these, and especially the latter, as having most Energy, ought to be used with the utmost Caution in the Beginning: Nay, I am of Opinion that the safest Method is totally to abstain from the anti-apoplectic Medicines, and to begin with the mildest Cordials, whose most energetic Parts being dissolved in a large Quantity of
some

some proper Vehicle, may more insensibly mix themselves with the Blood, and consequently produce their Effects more slowly. 'Tis, however, necessary to observe, that the same Danger is not to be dreaded from the external Use of the most efficacious Remedies. Thus we need not hesitate to apply Topics to the Temples, the Nostrils, the Wrists, the Pit of the Stomach, and all the Parts where the Arteries lying near the Surface of the Body, are expos'd to their Action and Influence: And, as the membranous Parts are none of the least considerable Instruments of the several Motions perform'd in the Body, a very particular Regard ought to be had to them. Frictions then of the Hands and Feet, as well as the Applications of spirituous Medicines to these Parts, are extremely useful; for though the Propriety of this Practice could not be shewn by Reasons drawn from Anatomy and Physiology, yet we might be convinc'd of it by the Observation of Mr. *Deventer*, who orders Frictions with Hair-Brushes to be made on the Soles of the Feet of such new-born Children as discover no Signs of Life, in order to restore the Circulation of the Blood, which is the Foundation or first Beginning of it.

Mr. *Deventer*, 'tis true, does not in this Case advise the Application of spirituous Medicines to these Parts: But as every one knows

knows that these Remedies, as well as all other Liquors, penetrate the Surface of the Body, and enter the Cavities of the Vessels, their external Application must necessarily produce a very happy Effect. Besides, this Method of using spirituous Medicines is of all others the safest, both because their Mixture with the Blood is not so quick as when they are exhibited internally, and because the Parts to which they are applied are most remote from the Center.

When Persons are taken from the Water, it is almost the universal Practice to hang them by the Heels, in order, as it is pretended, to make them throw out the Water they have swallowed: But this Method is not entirely useless, but also conduces very much to destroy the small Remains of Life which may possibly be left; for the Water swallowed by a drowning Person descends into the Stomach, and not into the Cavity of the Thorax, as is obvious from laying open such Persons; so that the Water swallowed cannot prevent their Recovery. For the Truth of this I have the Evidence of my own Senses; since, being plunged under Water, I opened my Mouth three times for Air, and each time swallowed a Mouthful of Water, which produced no other Sensation than that excited by the Liquors which I commonly swallow; a manifest Proof that the former went the same Way with the latter. It

It will possibly be objected, that this may happen so long as the Person retains a Sense of his State and Condition, tho' not afterwards. But as the Water is hindered from entering into the *Arteria Trochea* and Lungs by a mechanical Effort, in which Reason has no Share, so the Lungs may in this State be compared to an empty Bottle plunged in Water, into which the Fluid does not enter, because the Air it contains resists its Access; and this the rather happens, because the Motion of the Breast, destined to attack the Air, at that Time totally ceases, and consequently nothing forces the Water to enter and fill up its Place.

Thus, the Practice of hanging by the Heels is not only entirely useless, but also greatly conduces to destroy the Remains of Life, which may possibly be left; for by such a Suspension, the whole Column of Blood conveyed to the Heart by the inferior *Vena Cava* will necessarily press upon that conveyed by the superior *Vena Cava*, where the Blood being interrupted in its Course, regurgitates into the Jugular Veins, and consequently into the Head, where, by its Quantity and Weight, it retards the Motion of the Spirits, whose free Progress is absolutely necessary to restore the Circulation of the Blood, on which Life depends.

It is also to be observed, that one of the most efficacious Expedients for restoring to
Life

Life such as have been hanged or suffocated, is to use Venesection without Delay, especially in the Parts most proper to relieve the Head, such as the Ankles for Instance, and the Jugular Veins. Mr. *Sylva* advises to the former, and Mr. *Tralles* to the latter: But I shall not give the Preference to one above the other, till my own Experience shall authorize my Determination.

The Use of Venesection in such Cases must be sufficiently obvious to every one, who considers that hanged Persons die of an Apoplexy of the bloody Kind, and not for want of Respiration, or as is commonly thought, on Account of a Repletion and choaking up of the Breast by Blood; for when such Persons are laid open, the Breast is found almost entirely void of Blood, and the Brain extremely inflamed, both which Phenomena are highly agreeable to the Laws of the Circulation; since the Heart producing a Contraction of the internal and external Jugular Veins consequently hinders the Blood from descending, whilst at the same Time the strong Membranes of the Arteries conveying the Blood to the Head, hinder them from being equally compressed; so that the Blood continuing to ascend, without the Liberty of descending, must consequently be collected in too large a Quantity in the Brain, and there form an Apoplexy of the bloody Kind. The Breast, on the contrary,
contains

contains but little Blood, because the Air, whose Egress is hindered by the *Rope*, dilates itself so considerably, as to elevate the Ribs in a very perceptible Manner: Now this Air cannot dilate itself so strongly without at the same Time compressing the Membranes of the Pulmonary Vessels, which in Consequence of this Circumstance cannot contain their usual Quantity of Blood.

(4.) *Kirchman* is of Opinion, that *Celsus* here speaks of a Treatise wrote by *Democritus*, and entitled, ΠΕΡΙ ΑΙΤΝΟΥ, concerning the Want of Respiration. This Work was composed on Account of the Tale of a certain Woman, who returned to Life after having continued seven Days without the least Signs of it: Other Authors, such as *Galen*, *Pliny*, and *Diogenes Laertius*, ascribe the same Production to *Heraclides of Pontus*, who lived long after *Democritus*. But, without deciding this Controversy, it is certain, from the Treatise itself, that the Physicians of the earliest Ages knew, that there were Disorders which so locked up, or destroyed the external Senses, that the Patients labouring under them appeared to be dead. According to *Mr. le Clerc*, in his History of Medicine, “ *Diogenes Laertius* informs us, “ that *Empedacles* was particularly admired “ for curing a Woman supposed to be dead, “ tho’ that Philosopher frankly acknow- “ ledged that her Disorder was only a *Suf-* “ *focation*”

“ *focation of the Matrix*, to which he gave
 “ the Name *ἄπνευς*, a Greek Word, signi-
 “ fying *without Respiration*, and affirmed,
 “ that the Patient might live in that State
 “ for thirty Days.”

Mr. *le Clerc*, in the Work already quoted,
 tells us, that “ *Heraclides of Pontus* wrote
 “ a Book *concerning the Causes of Diseases*,
 “ and another concerning the Disease in
 “ which the Patient is without Respiration,
 “ (*περί τῆς ἀπνευς*) in which he affirmed, that in
 “ this Disorder the Patient sometimes con-
 “ tinued thirty Days without Respiration,
 “ so that he appeared dead in every Re-
 “ spect, except the Corruption of the
 “ Body.”

To these Authorities we may add that of
Pliny, who, after mentioning the lamentable
 Fate of *Aviola* and *Lamia*, affirms, “ That
 “ Such is the Condition of Humanity, and
 “ so uncertain the Judgment Men are capa-
 “ ble of forming of Things, that even Death
 “ itself is not to be trusted to.”

Colerus, in *Oeconom.* Part VI. Lib. xviii.
 Cap. 113, observes, “ That a Person as yet
 “ not really dead, may for a long Time re-
 “ main apparently in that State, without
 “ discovering the least Signs of Life; and
 “ this has often happened in the Times of
 “ the Plague, when a great many Persons
 “ interred have returned to Life in their
 “ Graves. Authors also inform us, that
 “ the

“ the like Accident frequently befalls Wo-
 “ men seized with a Suffocation of the
 “ Matrix.”

Forestus, in *Obs. Med.* L. xvii. Obs. 9.
 informs us, “ That drowned Persons have
 “ returned to Life after remaining forty-
 “ eight Hours in the Water, ; and some-
 “ times Women buried during a Paroxysm
 “ of the Hysteric Passion, have returned to
 “ Life in their Graves ; for which Reason
 “ it is forbidden by the Laws of some Coun-
 “ tries, to bury the Dead sooner than seven-
 “ ty-two Hours after their Death.”

This Precaution of delaying the Interment
 of Persons thought to be dead till seventy-
 two Hours after their Deaths, is of a very
 ancient Date, since *Dilberus*, in *Tom. I.*
Disput. Philol. observes, that *Plato* ordered
 the Bodies of the Dead to be kept till the
 third Day, *in order to be satisfied of the*
Reality of the Death. Now, from the Hi-
 stories already related, we may judge whe-
 ther this Precaution, tho’ more prudent than
 the Conduct of a great many others, is yet
 sufficient to ascertain the Death.

(5.) Tho’ in this and some other Passages
 Mr. *Winslow* informs us, that we may thro’
 Inadvertence take those who are really dead
 to be alive ; yet we are not for this Reason
 to run the Hazard of interring living Per-
 sons, through a culpable Precipitation ; since
 this

this very Error is a Reason sufficient to authorize Delay till all our Doubts are resolv'd.

¶ This Observation of Mr. *Winslow* is founded upon an History related by *Lancisi* in *Tr. de Morb, Subit. Lib. 1. Cap. 16.* where that Author tells us, that a certain Physician of *Rome*, happening to be present when a Person of the highest Distinction at Court died suddenly, after *Lancisi* had given him over, he, to the great Surprize of the whole Family, and especially of his Brother Physician, who could not enough admire his Folly, affirm'd that the dead Person was still alive, because his Pulse was perceptible. “ The
 “ ignorant Fool, continues *Lancisi*, was not
 “ sensible that the Pulsation he ascribed to
 “ the dead Body, was only that of his own
 “ Fingers, with which strongly pressing the
 “ Wrist of the dead Person, which was dry
 “ and lean, he hindered his own Blood,
 “ which was in an highly fervid State, from
 “ passing from his Arteries into his Veins,
 “ by which Means augmenting the Action
 “ of the Blood in the Extremities, he also
 “ increas'd the Pulsation of the Arteries
 “ lodg'd in them.” Such a Blunder, as *Lancisi* observes, must necessarily render the Healing Art contemptible in the Eyes of those who are not able to distinguish between her genuine and spurious Sons.

(6.) The Vibrations of the Arteries resemble those of the Strings of an Instrument;

ment; the larger the String is, the more sensible its Vibrations are. The Stroke of the Bow on the largest String of a Violin renders its Vibrations not only perceptible by the Touch, but also visible by the Eye. And the Vibrations of the large Strings of the Counter-Basse are so strong, that Gloves are necessary in order to play upon that Instrument; whereas 'tis quite otherwise with the Treble Strings, especially of the Violin, where the short and slight Strokes of the Bow produce only a simple Undulation.

The Vibration, then, or Pulsation of an Artery, considerable for the Largeness of its Diameter, and consequently for the Thickness of its Membranes, is very sensible; whereas that of the arterial Extremities is almost entirely lost, and the Pulsation is felt in an intermediate Degree in the Middle of the Artery. Hence it follows, that the Vibrations of the carotid and crural Arteries must be stronger than those of the Artery lodg'd in the Wrist, that situated between the Thumb, and those called the temporal Arteries. The crural and carotid Arteries may therefore afford Signs of the Circulation, when the others cease to furnish any Marks of it. For this Reason 'tis commonly said, that the Pulse of dying Persons ascends; for in this State, the Pulse of the Wrist is subject to the following Alterations, which I carefully observed in a Person near Death

Death. First I perceived a great deal of Frequency, tho' the Pulsations were distinguishable from each other. Soon after they became so quick, that it was an hard Task to find the Intervals between them, and at last a simple Undulation succeeded; which happening at a critical Hour for sick Persons, induced me to prognosticate a quick approaching Death, which, however, contrary to all Appearances, was deferred till next Day, the Circulation being in some Measure restor'd. In these Circumstances, the Pulse whose Motion is almost insensible in the Wrist may be perceived, by ascending along the Fore-Arm when the Artery is so situated that it may be felt, or when the Extenuation of the Patient readily exposes it to the Touch. But it is to no Purpose to seek for the Pulse above the Flexure at the Elbow, since the Artery is there too far from the Surface to render its Vibrations sensible. This Circumstance has, no doubt, laid a Foundation for a common, though erroneous Opinion, among the Vulgar, that when the Pulse ascends to the Flexure of the Elbow, the Patient is past Recovery. If this Doctrine is not universally true, it has at least some Foundation in Reason; since 'tis certain from what has been said, that the Circulation must be extremely languid when it is not perceived in an Artery

so

so considerable as that of the Arm at the Flexure of the Elbow.

But tho' the Motion of the Artery should not evince the Reality of the Circulation, yet we are not from the want of the former to infer the Non-existence of the latter, since all that Reason authorizes us to conclude, is, that the Vibrations of the Artery are perhaps become so short and slight that they escape the Touch. A Circumstance, which, though sufficient to evince a highly preternatural State, can never amount to an Infalible Proof of Death.

(7.) In this Passage, Mr. *Winslow* only speaks of that Respiration which is perform'd in the free or open Air. But besides the Histories related from *Pechelin* of two Persons, one of whom returned to Life after remaining sixteen Hours in the Water; and the other, after he had continued in it for at least forty-two Days, since *Pechelin* says he was found in the seventh Week after he was drown'd; and besides the already quoted Observation of *Forestus*, with respect to Persons who have revived after they had been forty-eight Hours in the Water, Naturalists speak of celebrated Divers, who have remained a considerable Time under Water without losing either their Life or their Vigour.

It would be a Task both curious and useful, to examine whether, and in what Manner

The UNCERTAINTY of
ner Respiration has been carried on in these
different Persons; or if it has not subsisted,
how the Circulation has continued without
its Assistance.

It has been always thought, that in such
Cases Respiration is not quite lost, tho' there
is neither in the human Body, nor those of
other Animals, any Organ adapted to at-
tract and receive the Air, which is copiously
mixed with the Water. It has therefore
been supposed, that the Circulation is in
such Persons performed in the same Manner
it is in the Foetus, which is, that the Blood
which enters the Right Auricle of the Heart
passes also in a great Measure through an
Aperture, which communicates between it
and the Left Auricle, whence it is convey'd
into the Left Ventricle; and that the re-
maining Blood of the Right Auricle, which
has not pass'd thro' the Aperture of Com-
munication, commonly called the *Foramen
ovale*, is forced into the Right Ventricle,
whence it is express'd into the Pulmonary
Artery, which for want of Air, opposing
itself to its Passage, forces it to take its
Course into the Aorta, which is performed
by Means of a Canal of Communication
between these two Vessels, commonly call'd
the *Arterial Canal*.

'Tis in vain to oppose this Doctrine, by
saying that such a Circulation becomes im-
possible in Adults; because the Arterial Ca-
nal

nal is in them changed into a Ligament, and because the Valve which shuts the *Foramen ovale* adheres to its Margins; for we are here speaking of a preternatural State, at least with respect to Adults, or rather of an Exception from the general Rule. But if it is true, that after the Birth of the Infant the Arterial Canal so changes its Position, that its Orifice, which opens into the Pulmonary Artery becomes higher than it was before the Fœtus respired, because the Lungs, when dilated by the Air, draw that Orifice upwards, which is the Reason that the Blood enters no more into it, and that the Canal itself has its Sides so collaps'd and shrivel'd up, as to be changed into a Ligament: This is, no doubt, a considerable Objection against the Continuation of the Circulation in Adults in the same Manner it is performed in the Fœtus.

But the Difficulty is still greater, if the Remark of Mr. Cheselden on the *Foramen ovale* is true; for he affirms, that this *Foramen* is almost never open either in Adults or in amphibious Animals, and adds, " That
" if it was, it could never be of the same
" Use to these Animals under Water, as it
" is to the Fœtus in the Uterus, unless the
" Arterial Canal was also open." If we admit all these Principles, we must necessarily conclude, that a Person may for some Time live without Respiration. The Ex-

ample of amphibious Animals which remain whole Days under Water, and consequently without Respiration, renders this Doctrine probable according to the Principles of Mr. *Chefelden*. From what has been said, we may in the second Place conclude, that the Way or Road of the Circulation in these Circumstances is as yet unknown, or that the Circulation may remain suspended without its being necessary that Death should follow.

'Tis not, however, reasonable to conclude, from the Observations already made, that in no Adult the Circulation can be performed in the same Manner as in the Foetus; for tho' it should be granted, that there is generally such a Change of Position in the Orifice of the Arterial Canal, which opens into the Pulmonary Artery; yet there may be Exceptions from this general Rule, and particular Instances are sufficient for our Purpose. Besides I see no Reason why, tho' the Arterial Canal should make an obtuse Angle with the Heart of an Adult, whereas it formed an acute Angle in the Foetus, this Position of it should hinder the Blood, which finds a Difficulty in passing thro' the Pulmonary Artery, from returning towards the Orifice of the Canal, since this is the only Passage which presents itself, that of the Heart being closely shut up by
the

the Valves, which prevent the Return of the Blood.

It will, no doubt, be objected, that this Canal is generally changed into a Ligament by the Adherence of its Sides, in Consequence of which it becomes useless: But I answer, first, that I only contend for particular Exceptions from the ordinary Laws of Nature; and secondly, that I am as much authorized to believe that the Arterial Canal may remain open, as that the Navel-String continues in that State; and it is sufficiently known, that this Canal sometimes discharges a considerable Quantity of Blood, when it has the Misfortune to be wounded. Besides, it is not always candid to conclude the Non-existence of a thing, because we never saw it.

I am not certain, whether Mr. *Chiselden* is absolutely in the right, when he asserts, that tho' the *Foramen ovale* remain'd open in amphibious Animals, it would be of no Use to them, unless the Arterial Canal was also open; since it is sufficient for sustaining the Circulation, that the *Foramen ovale* allow a Part of the Blood conveyed into the Right Auricle to pass into the Left Ventricle; for the Blood of the Right Ventricle may pass into the Lungs, and return to the Left Auricle. In order to establish this Assertion in Opposition to Mr. *Cheselden*, I need only mention what he himself says of

the Blood of the Foetus, which is, that it passes into the Pulmonary Artery in a Quantity sufficient to keep its Vessels open. Now it cannot be supposed, that the Condition of a Person who has respired, is worse than that of a Foetus; on the contrary, the Lungs of the former being always more dilated, since they never totally discharge the Air after its first Entrance into them, must of course afford a freer Passage for the Blood: This will appear still more probable, if we observe that the Circulation becomes slow in Proportion as the Respiration is rendered difficult; and perhaps from this Observation we may account for the Continuation of an insensible Perspiration, without having Recourse either to the Arterial Canal or the *Foramen ovale*.

(8) The Passage taken by *Lancisi*, from the eighth Book of *Quintilian*, and quoted by Mr. *Winslow*, first induced me to read various Treatises on the Funeral Ceremonies, not only of the Ancients, but also of different Nations among the Moderns, in order to know whether they used any Precautions to ascertain the Death of those supposed to be dead: and if they did, what these Precautions were. I shall therefore give an Abstract of what I have read in these Treatises; in the Execution of which Design, if every thing said has not a direct Relation to the present Subject, yet it will
not

not only amuse, but also instruct the Reader, and convince him of the Truth of what *Quenstedt* says, when he affirms, that with respect to the Manners and Times of Interment there are as many various Customs as there are Nations.

As no Principle in the human Breast is more prevalent and universal than the Love of Life, we might reasonably think, that Mankind would neglect no Methods of preserving that inestimable Treasure. But so inconsistent is human Nature with itself, that if we were to form an Estimate of things from the general Conduct, we should conclude Life to be a mere Trifle not worth the keeping. This is so true, that a chimerical, and often a ridiculous Point of Honour, the most brutal and unmanly Pleasures, the most unaccountable and unreasonable Customs, and even the most despicable Things are preferred to Life, universally accounted the greatest of Blessings. But that we may not deviate from our Subject, we shall now briefly enumerate the Customs of various Nations with respect to Interments, after having observed, that in this Point the *Greek* Philosophers were of different Opinions; for *Heraclitus*, who maintained that every thing was made of Fire, ordered the Bodies of the Dead to be burn'd; *Thales* ordered them to be laid in the Earth, because every thing ought at last to

return to the universal Principle, which according to him was Water ; and *Democritus*, who believed the Resurrection, ordered them to be preserved in Honey.

The antient *Persians* used but few Ceremonies on this Occasion ; for as soon as any Person was thought dead, his Body was forthwith exposed as a Prey to the Mercy of ravenous Animals : And this Custom was held as sacred as any peculiar to that People. When the Body was quickly devoured, it was accounted an honourable Circumstance for the surviving Family ; whereas its long Continuance was thought to carry something infamous in it, since the Animals despised it so much that they would not feed upon it. This Custom, however, did not always subsist in *Persia*, since, in some Periods of Time, they interr'd the Bodies of their Dead, but never burnt them. *Cicero* informs us, that they covered their dead Bodies with a Crust of Wax ; and 'tis sufficiently evident, that their Intention by this Practice was only to preserve themselves from being infected by the noxious Exhalations arising from them. It was for the same Reason, according to *Herodotus*, that the *Scythians* used the like Practice, and that the *Æthiopians* covered their dead Bodies with Plaister ; for different Methods have been used in order to attain the same End. Thus Salt, Nitre, Cedar, Asphaltus, Honey, Myrrh,

Myrrh, and Baums, have been employed to the like Purposes; as also Quick-lime, which, according to *Galen*, in *Tr. de Med. Simp. Facult. Lib. 9.* dries very powerfully, without corroding when frequently wash'd.

As the modern *Persians* are *Mahometans*, they interr their Dead in their Mosques without any remarkable Ceremonies.

As soon as any Person dies among the *Turks*, they wash his Body, shave off his Hairs, and wrap him up in a Sheet, soak'd first in Soap-water, and then in Rose-water. After this they lay him out at his full Length in a Bier, and interr him.

The *Chinese* also interr their Dead, after having put them in Coffins, and conveyed them to the Grave with lamentable Shrieks. But tho', as will afterwards appear, such Lamentations were in some Countries instituted with a political View; yet in *China* they seem only to be the natural Expressions of intense Grief and Sorrow.

The same may be said of the Custom of the *Americans*, whose Lamentations are extreme, when a young Person dies; moderate when one of a middle Age is cut off; and so transitory as hardly to testify the smallest Degree of Sorrow, when old Persons fall the Victims of Death.

The Inhabitants of *Mexico* and *Mechuacan* embalm'd and burnt the Bodies of their Dead, at least those of their Kings, whose

Funerals were performed with incredible Pomp and Solemnity. But I cannot determine whether their Method of Embalming was the same with ours, or whether it resembled that of the *Hebrews*, which we shall afterwards describe.

The Inhabitants of *Japan* interr them with the most exalted Demonstrations of Joy and Satisfaction; and as they are thus transported to see their Friends released from Life, and set at Liberty from all its Miseries, 'tis by no means probable that they should use any Pains to recall to this World those whom they suppose Death has conveyed to the other.

The Inhabitants of *Moldavia* wash the Bodies of their Dead, and interr them with great Lamentations.

Some Nations wash'd the Bodies of their Dead, probably with a View to the greater Decency and Cleanliness; tho', as will afterwards appear, other Countries used the same Practice with quite different Intentions.

The Inhabitants of *Greenland* have a mighty frugal Method of disposing of their Dead: for after dragging them out of the Caves in which the piercing Cold of the Climate obliges them to live, they expose them to be indurated by the Frost; a Method excellently calculated to destroy the small Degree of Life which may possibly remain

in a Body apparently dead. This Country must, no doubt, abound with Statues, tho' not of the *Colossal* Kind.

Among the *Tartars*, the Methods of disposing of the Dead have been various at different Times, since, during one Period, they hung up the Bodies upon Trees, in order to be rendered hard; and during another, eat them, at least such of them as were far advanced in Years. But the most common and universal Custom was to inter them. Among this People there was no Distinction made, except with respect to their Kings, whom they embalm'd in the ordinary Manner.

The antient Inhabitants of the *Balearian Islands*, now called *Majorca* and *Minorca*, covered the Bodies of their Dead with an Heap of Stones. But this Ceremony was preceded by an Operation, which, according to the Method in which it was perform'd, might be useful either in ascertaining Death, or putting an infallible End to Life, if any Degree of it still remained. This Operation consisted in cutting the Body into small Portions, which were put into a large Pitcher. Now 'tis sufficiently obvious, that the Method of conducting this Operation rendered it irretrievably mortal, or proper to recall the Dead to Life; for if they begun by cutting off the Head, or by giving some Wound in itself mortal, Death

was

was then the necessary Consequence ; whereas the Operation, when gently begun on one of the Extremities, might by the Pain have recall'd the Person to Life, if he was not totally dead.

The *Massagetæ*, *Dervises*, and *Essedons* eat the Flesh of their decrepit old Men along with Mutton. The *Dervises* strangled their Women, and interr'd them, after they were seventy Years of Age. The *Essedons* exposed the Bodies of such as died of any Diseases to the Mercy of ravenous Beasts. The *Caspians* did not embroe their Hands in the Blood of their Neighbours, but exposed Persons above seventy Years of Age to the wild Beasts of the Desarts. If a Transgression of the Laws of Truth is in any Case pardonable, the Concealment of Age was certainly excuseable in a Country whose Inhabitants were so shock'd at the Infirmities of superannuated Nature, that they invented such barbarous Methods to preserve those they loved from them. These Cruelties recall to my Mind two Lines of the celebrated *Corneille*, when speaking of the Daughters of *Pelias*, whose Motives, however, were very different from those of the *Caspians*.

*A Force de Pitié ces Filles inhumaines
De leur Pere endormi vout épuiser les Veines.*

The

The *Hircanians* kept Dogs for devouring their Dead, which were for that Reason called *Sepulchral Dogs*. The *Iberians* exposed the Bodies of the Dead to Vultures ; and the *Iclithiophagi*, a People who lived on nothing but Fish, threw their Dead into the Lakes and Rivers ; imagining that it was but equitable to restore them that Nourishment they had received from them ; or perhaps they were induced to this Practice by the Hopes of rendering the Fish they were afterwards to use, fatter, and more fit for the Purposes either of Nourishment or Luxury. The *Lotophagi* threw their Dead into the Sea ; but the *Hyperboreans* thinking it more noble to meet Death, than patiently to wait for his Attack, threw themselves headlong into the Sea when they were weary of Life. The *Colchians* us'd no Methods to abridge the Period of Life, which is generally thought too short already ; but when it was ended, they shut up the Bodies of the Dead in Bags of Leather, which they hung upon the Trees.

I might here give an Account of the Funeral Ceremonies us'd by a great many other Nations ; but as the Authors I have consulted only inform us, that they either interred or burned the Bodies of their Dead, I shall proceed to speak of those Countries whose different Practices seem to have some Signatures or Traces of the Truth I intend

to establish; or at least appear calculated to guard against burying Persons as dead, before they are really deprived of Life.

The Method, then, of embalming used by the *Egyptians*, was a Kind of chirurgical Test, with respect to the State and Condition of the Person supposed to be dead; for they first opened the Abdomen, from which they took the Intestines; thence they ascended to the Thorax, which they also laid open, tho' without displacing its contained *Viscera*, which they only washed. Then, according to *Muretus*, they extracted the Brain, by means of an Instrument introduced thro' the Nose, and afterwards filled all the Cavities of the Body with Aromatics, more or less costly according to the Condition and Circumstances of the Family to which the Deceas'd belonged.

But notwithstanding the Authority of *Muretus*, it must be owned, that, considering the Configuration of the Cranium, it is hard to conceive how the Substance of the Brain could be extracted from it in this Manner. The Persons employed in embalming, were by publick Authority appointed for that Purpose. But what is surprizing is, that it became customary to throw Stones at the Embalmer, as soon as his Work was over; which, if we may believe *Muretus*, was owing to the Horror with which the By-standers were struck upon seeing this Species
of

of Cruelty exercised on their Friends and Relations.

If these Stones were thrown in earnest, we may justly suppose that it was no easy Matter to find Embalmers, since 'tis far from being agreeable to run a Risque of losing Life several Times a Day in the Discharge of a Public Office. Besides, the Friends and Relations of the Deceas'd might have prevented this Sentiment of Horror, by absenting from the mournful Spectacle which produced it. But 'tis more probable, that the Custom of insulting the Embalmers arose not so much from a pretended Horror excited by an imaginary Piece of Cruelty, as from this Circumstance, that several Persons supposed to be dead discovered Signs of Life under their Hands. And this Conjecture is strengthened by the same *Muretus*, who tells us, that Persons were embalmed as soon as they were thought to be really dead. But whether this Custom of Embalming proceeded from a Principle of Respect to the Deceas'd, or a Fund of Vanity in his surviving Friends, 'tis certain that it prevented the Interment of such as were alive, and render'd such Deaths as were before dubious, certain and unexceptionable.

The Inhabitants of *Florida*, perhaps, with as little Design to ascertain Death, as the *Egyptians*, used a Method, which, though different

different, was yet equally proper to discover the Truth: For, according to *Muretus*, as soon as any Person died in *Florida* his Body was exposed to a large Fire, and turned now and then from one Side to the other, in order to dry it; then they cloathed it in the richest Habits they could afford, and kept it, like a Piece of Statuary, in a Niche made for that Purpose in the Wall of the House.

Tho' this Custom, no doubt, proceeded from Tendernefs and Respect, yet it is equally certain, that exposing the Body to the Fire was an infallible Method of discovering whether it had any Remains of Life in it or not.

The Funeral Ceremonies used in the *Caribbee Islands* are in a great Measure conformable to Reason: For they wash the dead Body, and after having put it into the same Posture with that of an Infant in the Uterus, wrapt up in a Cloth, they then begin their Lamentations, which are intermixed with comical Discourses made to the dead Person. They talk to him of every Object or Circumstance which they suppose capable of making him in Love with Life; such as his Wife, his Children, his Riches, the Offices he bore, and the Veneration that was paid him; and each of these Details is followed by a Repetition of these Words, *How comes it then that thou hast died?* They speak

speak to him for Instance, according to
Muretus, in the following Manner; “ You
 “ could have lived very comfortably, since
 “ you wanted neither *Manioc*, nor *Potatoes*,
 “ nor *Bananoes*, nor *Ananas*; *How comes it*
 “ *then that you have died?* You was very
 “ considerable in the World, since every
 “ one both esteemed and honoured you;
 “ *How comes it then that you have died?*
 “ Your Relations caress’d you, did all they
 “ could to preserve the Serenity of your
 “ Mind, and allowed you to want for no-
 “ thing; *How comes it then that you have*
 “ *died?* You was necessary to your Coun-
 “ try, you had signalized yourself in ma-
 “ ny Battles, and you was the Man who
 “ screen’d us from the Insults of our Ene-
 “ mies; *How comes it then that you have*
 “ *died?*” Thus they expostulate with the
 Dead, in a Strain suited to his particular
 Situation and Character during Life.

When the Lamentations are over, they
 place the Body on a small Seat, in a Grave
 about four or five Feet deep, and for ten
 Days present Aliments to it, intreating it to
 eat; then, convinced that it would neither
 eat, nor return to Life, they for its Obsti-
 nacy throw the Victuals on its Head, and
 cover up the Grave.

’Tis certain, that it would be more rea-
 sonable to have the Body at home laid out
 at its full Length, than to huddle it up in

a Grave; but notwithstanding this Oversight, it is evident from the Practice of this People, that they wait so long before they cover the Body with Earth, expecting that it will return to Life, and this Expectation is undoubtedly founded upon Experience; since they have had Instances of Persons recalled to Life by these Measures, which are still the less exceptionable, because Cold, which in some other Countries would prove mortal, is unknown in that Climate.

These Lamentations, as we shall shew when we come to speak of the *Jews* and *Romans*, are neither so unreasonable nor useless as some may imagine. But what is still more surprizing is, that according to *Meletetus*, quoted by *Quenstedt*, the antient *Prussians* used similar Lamentations; as also the Inhabitants of *Servia*, according to *Busbeque*, in the History of his Embassy into *Turky*. 'Tis certainly hard to determine, why Customs of so particular a Nature could prevail in Countries so distant and remote from each other, whilst the smallest Traces of them were not to be found in the adjacent Nations.

The *Thracians*, according to *Herodotus*, kept their Dead only for three Days, at the End of which Time they offered up Sacrifices of all Kinds, and, after bidding their last Adieu to the Deceased, either burned or interred their Bodies.

According

According to *Quenstedt*, the antient *Russians* laid the Body of the dead Person naked on a Table, and wash'd it for an Hour with warm Water. Then they put it into a Bier, which was set in the most public Room of the House. On the third Day they convey'd it to the Place of Interment, where the Bier being opened, the Women embraced the Body with great Lamentations. Then the Singers spent an Hour in shouting and making a Noise, in order to recall it to Life; after which it was let down into the Grave, and covered with Earth. So that this People used the Test of warm Water, that of Cries, and a reasonable Delay, before they proceeded to the Interment.

Quenstedt also informs us, that in a certain City of the *East*, called *Sackion*, the Inhabitants keep their Dead without Interment, sometimes for seven Days, sometimes for a Month, and sometimes for ten Months, in which Case they shut them up in Coffins, or Boxes, in order to prevent the disagreeable Smell which they would otherwise diffuse.

Tho' the Funeral Ceremonies last mentioned seem to evince, that the People who used them intended, by their Means, to satisfy themselves of the Reality of Death, before they proceeded to Interment; yet I have endeavoured to discover whether the Practices of the most considerable Nations
con-

contained any Scrutinies or Tests of a similar Nature. With this View I had recourse to the Laws and History of the *Jews*, but was greatly surprized to find only one Regulation with Respect to Interment, in the 21st Chapter of *Deuteronomy*, where the *Jewish* Legislator also orders Persons hang'd to be buried the same Day.

'Tis hard to discover the Reasons why *Moses* is so silent with respect to the Funeral Ceremonies of his Country, that even some of the *Jews* themselves find fault with their Law on this Account; for we cannot suppose that the Unerring Spirit by which *Moses* was guided, would have forgot an Affair of such Importance as the Discovering whether Persons were really dead or not. We may therefore reasonably conclude, that the Funeral Ceremonies of the *Jews*, as handed down from *Adam*, were so perfect and unexceptionable, as to require no Reformation or Change.

Gierue and *Quenstedt* have, however, from the History of the *Jews*, collected the following Particulars with respect to the Funeral Ceremonies of that People.

As soon as a Person was dead, they clos'd his Eyes, tied up his under Jaw with a Fillet, and cut off his Hairs, stopp'd the Orifices from which the Excrements are discharged, washed the Body, perfumed it,
wrapped

wrapped it in a Shroud, and put it in a Bier.

Gierus observes, that it was the Office of the nearest Relation to shut the Eyes, which however, was thought Homicide when performed before the Person was certainly dead ; because in Circumstances where Life depends on so little, the slightest Motion is sufficient to extinguish the small Remains of it.

We have already observed that they perfum'd the Bodies, but not embalm'd them, by which we mean an Operation in a great Measure similar to that we described when we were speaking of the *Egyptians* ; whereas the embalming of the *Jews* was only an external Application of Perfumes. This is evident from *John*, Chap. xix. ver. 40. where 'tis said, *They took the Body of Jesus and wound it in Linen Cloths, with the Spices, as the Manner of the Jews is to bury.* Another equally strong Proof of this Truth may be drawn from the Words of our Saviour, recorded in *Matthew*, Chap. xxvi. ver. 12. *For in that she hath poured this Ointment on my Body, she did it for my Burial.* Now these Words would have been so far from being worthy of our Saviour, that they would have been direct Nonsense, if it had been customary for the *Jews* to embalm in our Manner.

The Shroud used by the *Jews* consisted of

of two Pieces, which is perhaps meant by St. *John*, when he says, the Body of *Jesus* was wound in *Linen Cloths*. One of these Pieces was a kind of Napkin, which covering the Face was tied behind. The other was employed in covering all the rest of the Body, after the Hands and Feet were secured by Fillers. This at least was the Condition of *Lazarus*, according to the Account St. *John* gives us of his Resurrection. *Father Calmet* thinks, that the Bodies of the Dead were swaddled up almost in the same Manner Infants generally are: But he must have either mistaken this Passage, or else there must have been different Methods of interring the Dead among the *Jews*.

The Bier in which the Body was laid was not shut at the Top, as our Coffins are, as is obvious from the Resurrection of the Widow of *Naim's* Son, recorded in the seventh Chapter of *Luke*, where these Words occur; *And he came and touched the Bier, and they that bare him stood still. And he said, young Man, I say unto thee arise; and he that was dead sat up, and began to speak.*

Gierus and *Calmet* inform us, that the Body, before its Interment, lay for some Days in the Porch, or Dining-Room of the House. According to *Maretus*, it was probably during this Time that great Lamentations were made, in which the Name
of

of the Deceased was intermixed with mournful Cries and Groans; and that the Family might receive some Comfort, and avoid the Sight of their dead Relation, Women were hir'd for this Purpose, and accompanied with Players upon Instruments.

Mr. *Boyer*, Member of the Faculty at *Paris*, observes, in a Letter with which he favoured me, that such Lamentations are still used by the Eastern *Jews*, and even by the *Greeks* who embrace the Articles of the *Greek Church*. These People hire Women to weep and dance by Turns round the Body of the dead Person, whom they interrogated with respect to the Reasons he had for dying, since he was in a happy Condition in this World. Mr. *Boyer* says, he has often been a Spectator of those Ceremonies, and that they have frequently interrupted his Sleep, when any Person in his Neighbourhood died. But he does not mention the Number of Days they kept their Dead before Interment; nor is this Point determined either by *Gierus* or *Calmet*.

In order to satisfy myself with respect to this, I had recourse to the History of the Death and Resurrection of *Lazarus*, where we are told, *That when Jesus came to his Relief, he found that he had lien in the Grave four Days already.* Which Words, when compared with *Martha's* Answer to *Jesus*,
Lord,

Lord, by this Time he stinketh, for he hath been dead four Days, induce the Commentators to affirm that he was buried the same Day on which he died.

On the Day appointed for the Interment, they took the Body on their Shoulders, and carried it out of the City in order to bury it, in the strict Sense of the Word, or to lay it in a Tomb, cut in a Rock. The Sepulchres of the Rich were at least of this Kind, as is obvious from the Accounts we have of the Cave which *Abraham* bought of *Ephron*, and of the Tomb of *Jesus Christ*, which *Joseph of Arimathea* had ordered to be made for himself.

The *Talmud* regulates the Dimensions of these Caves, which were six Cubits broad, and four in Depth, with seven or eight Graves in the Bottom to contain as many Bodies.

Hence, we have Reason to believe that the Custom of washing and perfuming the Bodies of the Deceased among the *Jews*, was instituted less for the Sake of the Dead, than for the Advantage of the Living; for as they kept the Bodies several Days before Interment, the bad Smell would have either rendered this Ceremony impracticable, or the House contagious, without the Precaution of washing and perfuming, since *Judea* being a warm Country, the Bodies of the Dead must of Course have been much sooner

sooner subject to Corruption than in colder Climates. As this was the Reason which determined the *Greeks* and *Romans* to practise these two Ceremonies, we have also Ground to believe that the *Jews* used them with the same View. The modern *Jews* are in this respect far more delicate than their Forefathers, since in the Water employed in washing the Dead they boil Chamomile, dried Rose-Leaves, and other aromatic Flowers.

'Tis also to be observed, that as their Biers were open, they were not attended with the same Inconveniencies which accompany our close Coffins, in which Persons alive, and in perfect Health, would be quickly suffocated; so that it can hardly be imagined that Patients supposed to be dead could recover Life in them.

When we come to treat of the *Romans* we shall consider the Funeral Lamentations of the *Jews*, and only here observe, that in the Tombs of this last mentioned People, the Dead, if they should happen to return to Life, run a smaller Hazard of being suffocated, than in our Graves; since theirs, at least such as were destined for Persons of Distinction, were large and spacious Caves. But of whatever Kind their Tombs were, there were no Hazards run, if they did not lay the Bodies in them till their disagreeable
G Smell

Smell and Corruption had convinced them of the Certainty of their Death.

The Examples of some *Romans* burned alive, notwithstanding all the Precautions taken by that People, are hard to be accounted for.

Lanzoni, a Physician of *Ferrara*, informs us, that when any Person died among the *Romans*, his nearest Relations clos'd his Eyes and Mouth; and when they saw him ready to expire, they catch'd his last Words and Sighs. Then calling him aloud three Times by his Name, they bid him an eternal Adieu. This Ceremony of calling the dying Person by his Name, was called *Conclamation*.

The Custom of Conclamation was of a Date prior to the Foundation of *Rome*, and was only abolished with Paganism, under which it was generally and religiously observed. *Servius*, in his Commentary on *Virgil*, tells us, " That the *Romans* were
 " so punctual in this Affair, that if any
 " Person died out of his own House, they
 " forthwith conveyed him thither, that
 " they might have the Liberty and Convenience of performing so essential a Piece
 " of Duty to the Dead." But what more effectually proves the inviolable Attachment of the *Romans* to this Ceremony, is the extravagant and foolish Rigour with which they observed it; since they used it in their Houses

Houles with respect to those Persons, who had died in foreign Countries.

Propertius acquaints us with the Effect they expected from this first Conclamation; since there were several of them, as we shall afterwards see; for in *Lib. IV.* he introduces *Cynthia* as saying,

*At mihi non oculos, quisquam inclamavit euntes;
Unum impetrassem, te revocante, diem.*

“ No-body called me by my Name at
“ the Time my Eyes were closing, and I
“ should have enjoyed an additional Day,
“ if you had recalled me to Life.”

I shall not pretend to determine either the Number or Form of the various Conclamations used: It appears from this Passage of *Propertius*, that the Poet only speaks of a Conclamation made by the Voice, at the Time the Soul was leaving the Body. But we may venture to affirm, that all the Conclamations were not made in the same Manner, as is certain from a Piece of Statuary preserved among the Collection of Antiquities at the *Louvre*, which exactly represents what pass'd immediately after the Death of Persons of Distinction; and on which a *Benedictine* has wrote a curious Dissertation, in a Work printed at *Paris* in 1739, and intitled, *An Explication of remarkable*

124 The UNCERTAINTY of
markable Monuments, relating to the Religion
of the most ancient People.

This curious Piece of Antiquity greatly illustrates our Subject, and represents a young Lady in a reclining Posture, with her Head supported on her Left Hand, and her Neck and Bosom uncovered. At the Head of her Bed is a Child, represented as drowned in Tears, and retiring towards a Lady sitting in an Arm-Chair, with a Foot-stool before it. Behind this Lady is a Woman, who has just torn her Garments, and consequently has her Bosom and Arms bare, with a Bracelet on the Left Arm. Behind her is another Woman, who with an Air of Indifference seems to look on the Persons standing at the Foot of the Bed. Before this Woman is a Genius holding an inverted Flambeau. On the Right Hand of the Lady, seated in the Arm-Chair, is a Man sounding a Trumpet. On the Right Side of the Bolster of the Bed, which pretty much resembles one of our Sopha's, is a Man sounding a Horn. At the Middle of the Head-board of the Bed is a Child, whose sorrowful Looks are fixed on the dead Lady. At one Extremity of the Head-board is a young Man, holding in one of his Hands a Box, whose quadrangular Lid or Covering terminates in a Point; at a little farther Distance are two other Men, whose Attitude represents them as be-

beholding the Whole with an Eye of Satisfaction. Opposite to the Head board is a Fire, on which is a Vessel whose Cover is almost concealed by the Steam arising from it. Under the Bed are the Slippers of the Deceased, and a Dog sitting on his Tail. The Statue thus described is explained in the following Manner.

The Lady lying on the Bed, according to the *Benedictine*, is one who has just died, and I do not in the least doubt of the Truth of his Conjecture, though she rather resembles a Person fast asleep, than one who has just expired. But the Author is not accountable for the Faults of the Statuary; and the other Figures of the Piece sufficiently prove that the Woman is dead, since it would not only be Folly, but even Madness, to sound Trumpets and Horns in the Ears of a Person struggling with the Agonies of Death. The Neck and Breast are uncovered, that the Sound of the Instruments may make the greater Impression upon her, and more easily agitate the Parts subservient to Life. The Child drowned in Tears, appears to be the Offspring of the Deceased; and the Lady sitting in the Arm-Chair with the Foot stool, her Mother. The Foot-stool and the Bracelet which the other Woman has on her left Arm, are Proofs that they were Women of Distinction. The Genius holding an inverted

G 3

Flambeau,

Flambeau, represents *Hymen*, extinguishing the Marriage Torch. The two Men, one of whom sounds the Trumpet, and the other the Horn, are two Servants of the Goddess *Libitina*, hired to make the Conclamations with the Sound of Instruments. He who holds the Box is another Officer of *Libitina*, and the Box contains the Perfumes they are about to use. The two other Men are Funeral Officers, perhaps Perfumers, who with an Air of Satisfaction wait till the Conclamations are over, that they may wash and perfume the Body. The Vessel from which the copious Stream arises, is that in which they boiled the Water destined for washing the Deceased.

The only Observations relative to our Subject made by the *Benedictine*, are, 1st. That the Persons who performed the Conclamations with Trumpets and Horns put themselves in such a Posture, that the Sound of these Instruments might act upon the Head, enter the Ears, and perhaps penetrate into all the Cavities of the Body, to which, as the Antients imagined, the Soul might possibly make her Retreat. 2^d. That it was for the same Reason they uncovered the Neck and Breast of those over whom the Conclamations were performed with Instruments. 3^d. That there was sometimes an Interval between the Death and the Conclamation. 4th. That the first Conclama-

tion

tion was made immediately after the Death, and the last immediately before the Body was lifted in order to be interred: And 5th. That they frequently repeated the Conclamations during the Time they kept the Body in the House.

That the *Romans* sometimes performed the Conclamations by means of Instruments, is certain from a Passage of *Petronius*, who informs us, that one *Trimalcion* being intoxicated with Drink, ordered the Servants of *Libitina* to be brought; and laying himself on a Bed, as if he was dead, ordered them to play something that was pretty. Upon this one of them sounded his Horn so strong, that he not only alarmed all the Neighbourhood, but also brought the Guard about the House. This, therefore, is a Species of Conclamation not performed by the Voice; and besides that, there is not in this Piece of Statuary the least Mark of Conclamation by the Voice; It is certain that the Voice could have produced no Effects, being drowned by the shrill and penetrating Sounds of the two Instruments.

It is pretty probable, that this second Kind of Conclamation is even of a Date prior to the other, as may be naturally deduced from the Passage quoted by the *Benedictine* from *Hyginus*; who, in order to prove the Antiquity of Conclamation, derives its Original from *Tyrrenus*, the Son of

of *Hercules*, who, when he came to reside in *Etruria*, invented the Trumpet; for as the primitive Inhabitants of that Country imagined that he and his Companions eat Men's Flesh, he assembled them by the Sound of a Trumpet, in order to shew them that one of his Companions who had died, was interred, and not eaten. " Since which
 " Time, continues *Hyginus*, the *Romans*,
 " in Imitation of *Tyrrhenus*, have always
 " used the Custom of sounding the Trum-
 " pet when any one dies, and by that
 " Means assembling his Friends, that they
 " may be convinced that he was neither
 " killed nor poisoned."

After a Person had expired, his Body was taken out of the Bed, and washed with warm Water by the nearest Relations or Friends. This is very naturally accounted for by *Quenstedt* and *Caspar Bartbius*, who in *Advers. Lib. 37 Ch. 17*. tells us, " That
 " it was customary among the Antients to
 " wash the Bodies of their Dead in warm
 " Water, before they burned them, that
 " the Heat of the Water might rouse the
 " languid Principle of Life which might
 " possibly be left in the Body."

By warm Water we are to understand boiling Water, as is obvious from the copious Steam arising from the Vessel represented in the Piece of Statuary already ex-

plained, as also from the two following Lines of the Sixth Book of *Virgil's Æneid*:

*Pars calidos latices, & abena undantia flumamis
Expediunt, corpusq; lavant frigentis, & unguunt*

“ Some of the Companions of *Æneas* with
“ boiling Water taken from Brasen Vessels,
“ wash the dead Body, and then anoint it.”

This is also one of the chirurgical Tests recommended by Mr. *Winslow*. But it appears from the Conduct of the *Romans* that they reposed no more Confidence in it than he, however efficacious it may be for exciting the Signs of Life in Persons who have any Remains of it; since they kept the Bodies of their Dead for several Days, lest thro' Precipitation they should interr them with any Remains of Life.

After the Body was washed, it was perfumed with precious Essences, which, according to *Arnobius*, were not spared on such Occasions; since in speaking of a Corps, he tells us that it was *Opobalsamodum*, moist with Opobalsam. *Kirchman* informs us, that “ The Design of this Practice was to prevent the disagreeable Smell arising from the Corps.”

After the Body was anointed, it was cloathed with the *Toga*, if the Person was only a Citizen: but with the *Pretexta*, or Robe of State, if he bore any Office.

When

When the Body was cloathed, it was laid in a Chamber, where it was kept for seven Days: And as the disagreeable Smell of the Corps must have been more than a Ballance for the grateful Odour of the Perfumes with which it was rubb'd, they erected at the Foot of the Bed, a Kind of small Altar, which they called *Acerra*, and on which they continually burned Perfumes, for fear of disgusting or incommoding those who approached to the Corps, the Design of which we shall afterwards shew.

This Custom is, perhaps, the Origin of our Beds of State, on which Persons of Distinction are laid. But surely they are degenerated from their original Institution, since generally the Body is not laid upon them till it is embalmed in the ordinary Manner; so that it is now only Pride which supports this Custom.

The *Romans*, as *Lanzoni* informs us, kept the Bodies of the Dead seven Days before they interred them: And *Servius*, in his Commentary on *Virgil*, tells us “ That
“ on the eighth Day they burned the Body,
“ and on the ninth put its Ashes in the
“ Grave.” They therefore kept the Bodies seven Days, and it is probable, that they did not before next Day put the sepulchral Urn into the Grave, since the Funeral Convoys were made in the Night, and since a considerable Time was requisite to separate the
the

the Ashes, and prepare them according to the usual Method.

Polydorus in *Tr. de Rer. Invent. Lib. 6. Cap. 10.* and *Alexander ab Alexandro* in *Dier. Genial. Lib. 3. Cap. 7.* are also of Opinion that the *Romans* kept their Dead seven Days : And *Gierus* affirms, that they sometimes did not bury them till the Ninth. But *Quenstedt* says, that he could adduce a great many Arguments to prove that they had not always a fixed Number of Days for this Purpose. Without the Force, however, of these Proofs, I can easily induce myself to believe that they deviated from the most universal Custom, when evident and incontestable Marks of Death rendered it safe to interr before the usual Time. *Alexander ab Alexandro* also observes, that it was customary among the *Greeks* to keep the Bodies of their Dead seven Days before they put them on the Funeral Pile ; and it was, no doubt, for this Reason that they perfumed them, as appears from the Accident which happened to *Asclepiades*, and which we have already related.

It would have, perhaps, been sufficient, to have kept the Bodies of the Dead seven or nine Days, or till Putrefaction evinced the Certainty of Death ; but the *Romans* carried their Circumspection farther, since, to use the Words of *Quenstedt*, “ Those

“ who were employed in watching the
“ Dead, now and then began their Con-
“ clamations, and all at once, called the
“ dead Person aloud by his Name;” be-
cause, as *Celsus* informs us in the Preface
to his first Book, “ The Principle of Life
“ is often thought to have left the Body
“ when it still remains in it; for which
“ Reason Conclamations were made, in or-
“ der, if possible, to rouse and excite it.”
Father *Pomey* informs us, that the *Romans*
now and then threw cold Water on the
Faces of their dead Bodies; and every one
knows what happy Effects such a Practice
produces on Persons in a Deliquium.

All these Measures proving ineffectual,
they crowned the Dead with Flowers, and
laid him in the Porch of the House, with
his Feet towards the Door, where he re-
mained till Night, the Time generally de-
signed for Interment. Then after the last
Conclamation, by *Quintilian* called the *Con-
clamata Suprema*, and to which *Terence* al-
ludes in the Words, *Desine, jam conclama-
tum est*; “ Give over, the Conclamation is
now made,” the Recovery of the dead
Person to Life being despaired of, his Body
is either interred or burned; for the *Romans*
had their Choice of these two Methods of
Burial, the latter of which, according to
Pliny, was not of a very antient Date; and
the Reason he gives for this Change of In-
stitution,

stitution, is, that Persons who died when waging War in foreign Countries, were raised after their Interment. But in his *Hist. Nat. Lib.* 7. he tells us, " That a great
 " Number of *Roman* Families followed the
 " antient Custom, such as the *Cornelian* Fa-
 " mily, for Instance, no Branch of which
 " was burned before *Sylla* the Dictator,
 " who chose this Method, lest his own Bo-
 " dy should be treated in the same Manner
 " he had done that of *Caius Marius*, which
 " he ordered to be raised from the Grave."
Cicero also informs us, that *Sylla* was the
 first of the *Cornelian* Family who was burn-
 ed.

It is surprising that *Kirchman* should, from a Law enacted by *Numa*, forbidding to sprinkle the Funeral Piles with Wine, find Fault with *Pliny* for asserting, That the Custom of burning the Dead among the *Romans*, was but a new Institution made in his own Time: For it is by no means to be supposed, that *Kirchman* was better acquainted with the State of *Rome* than a celebrated Author of that Nation, who lived fifteen Centuries before him. All that can be reasonably inferred from the Law of *Numa* is, that Wine should not be wasted in Burials, if the Custom of the *Greeks*, who long before that burned the Bodies of their Dead, should ever happen to prevail in *Rome*; and perhaps this Law was founded
 on

on what *Numa* himself had sometimes seen practiced. But these Examples may be looked upon as Deviations from the general Custom, and *Pliny's* Authority must in this Case be more depended on than *Kirchman's*.

Some of the *Roman* Customs, as well as their original Laws, were, no doubt, borrowed from the *Greeks*, who at first interred their Dead, but in Process of Time burned them. The Origin of this Custom, according to *Kirchman*, was the Subtilty of *Hercules*; who having sworn to *Lycimnius* to send back his Son *Arneus*, whom he took with him to besiege *Troy* on Account of the Perfidy of *Laomedon*; that he might perform his Promise, ordered the young Prince to be burned, after he had been killed in Battle, and sent back his Ashes to the Father. It is by no Means surprizing to observe, that Actions done without any Design to establish future Customs, should yet produce that Effect, since Novelty and a Love of Singularity are Motives which have in all Ages had a great Influence on Human Nature. But to return to the Funeral Ceremonies of the *Romans*.

During the Time the Body was conveying to the Grave, the Lamentations, Cries, Tears, and Mournings were redoubled, so that the whole Company seemed to unite their Efforts, in order to recall the Dead to Life,

Life, as is obvious from the Passage before quoted from *Quintilian*, relating to the Use of these Cries and Shrieks. It is not, therefore, so much Lamentations, as the Excess and Indecency of them, or perhaps a Degree of Fury, which prompts Persons to kill themselves, or tear their Faces, that it is forbidden in the 34th Law of the Twelve Tables, in these Words: *We forbid Women to tear their Faces, and make Lamentations at Funerals.* For *Quintilian* not only mentions the Reasons and Advantages of this Custom, but it also appears that the Law relating to it was very ill observed. Besides, this Law of the Twelve Tables, perhaps, extended only to the Women of the Family to which the Deceased belonged, and not to those who were hired to perform the Lamentations.

This Conjecture is rendered very probable by two Circumstances; the first of which is, that the Lamentations are forbidden to the same Women, who are ordered not to tear their Faces. Now, it is certain that this Prohibition extended only to the Women of the Family, and not to the hired Mourners, who were wiser than to disfigure themselves daily for those very Deaths by which they themselves lived. The second Circumstance confirming this Conjecture, is, that the Laws of the Twelve Tables were originally wrote in *Greek*. Now, if
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we may believe *Quenstedt*, *Plato* in his Republic condemned excessive Demonstrations of Grief; and *Solon* forbid the *Athenians* to use Lamentations, or any external Marks of Grief, since they were useless, and by no Means subservient to any Purpose in Life.

This is a full Detail at least of all the *Roman* Funeral Ceremonies relating to our Subject. I have endeavoured, but in vain, to discover, whether the Conclamations, the Cries when the Corps was carrying to the Grave, and the Precaution of keeping the Body for so many Days, were prior or posterior to the deplorable Fates of *Aviola* and *Lamia*; for if they were prior, I should thence conclude that seven or nine Days are not sufficient to ascertain Death: And this would greatly confirm the Doctrine of *Zacchias*, and other Physicians, who affirm, that there is no infallible Sign of Death but a beginning Putrefaction. Besides, the before-mentioned Accident which happened to *Asclepiades*, and which is of a far older Date than that related by *Pliny*, evinces that the *Greeks* were sufficiently convinced of the Uncertainty of those Signs which are commonly thought the Characteristicks of Death, even when they have subsisted for a considerable Number of Days successively.

But since the Signs of Death are so uncertain, that the most sagacious have often been.

been deceived by them, it is hard to give a Reason why the wise and reasonable Precautions of the *Romans* should be so much neglected among *Christians*: For if we look back into the Practice of the Primitive Church, we find but few Tests used in order to ascertain Death, since they only shut the Mouth and Eyes of the Deceased, embraced him, washed and perfumed his Body, and then put Cloths on it. After this, the Officers of the Church came and carried the Body, which was exposed for some Time at the Door, to the Place of Interment.

The Practice of washing the Body subsisted longer than any of the rest, since it was observed in the Time of *Gregory of Tours*. The Custom of perfuming the Dead has been abrogated ever since, so that we have now only faint Remains of it in some Popish Countries.

By our unaccountable Inclination to recede from the Customs of the Heathens, whether reasonable or not, we have also lost other Practices highly beneficial to Society. *Baruffaldi* greatly extols the Synodical Statutes of Cardinal *Laurentius Magalotti*, Bishop of *Ferrara*, who thinks that “ Ridiculous Mournings and effeminate Lamentations are unworthy of Christians, and better become Heathens, who have no Hope, and whose Practice of bewailing
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“ing the Dead was so indecent, that they
 “not only run up and down the Streets like
 “mad Persons, but also hired Singers and
 “Mourners to honour those who were
 “dead, by feign’d and counterfitted Tears.”

It is however certain from what has been said concerning these Customs of the Heathens, that they were wise Institutions, and sufficiently conform to the Laws of God and Man, which forbid Murder. But Cardinal *Magalotti* was no Antiquary, and which is still more, he not only misunderstood, but also applied a Text of *St. Paul*, who, in order to exhort the *Thessalonians* from grieving like those who had no Hope, tells them, That a Departure from this was a Passage into a far happier and more glorious Life: For, says he, in *1 Thess. Chap. 4 ver. 13. I would not have you to be ignorant, Brethren, concerning them which are asleep, that ye sorrow not as others which have no Hope.* By which Words the Apostle *Paul* neither condemns that Grief, which Tenderness and Humanity authorise, nor the Precautions which the Fear of losing those whom we love may induce us to use, in order to ascertain their Death; since he only dissuades from that unreasonable and excessive Sorrow which results from the Thoughts of being for ever separated from those who are dear to us. So that this Passage only relates to a Grief similar to that
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of the *Sadducees*, and some of the Heathens, who did not believe the Immortality of the Soul : For as the Apostle *Paul*, abstracting from his Inspiration, was well acquainted with Human Learning, it is by no means probable that he was ignorant of this, that the greatest Part of the Heathens expected to rejoin their Friends in the *Elisian Fields*, as we hope to see ours in Heaven.

The Custom of making Lamentations still prevails in *Picardy*, especially in the Country, where, when the Body is about to be carried to the Grave, all the Women embrace it, make terrible Lamentations, and call the deceased Person by his Name. Nor does this Practice proceed from a Principle of Humanity and Tenderness, since they set about it, without shedding a Tear, and perform the like Office to all dead Persons they have an Opportunity of seeing about to be carried to the Grave ; and the only Reason they give for such a Conduct, is, that it is customary.

It is true, Interments are not made with such Precipitation and Hurry thro' all the Christian World, as they are in *Paris*, and the adjacent Towns, where it is common to interr the Dead before they have been twenty-four Hours deprived of Life.

Mr. *Winslow* informs me, that in *Denmark* they do not bury their Dead till the fourth, or the End of the third Day, on account of the

the Preparations requisite for the Interment. But as their Funeral Ceremonies are almost the same with those used at *Marseilles*, I shall for a Description of them, take the following Passage from the forementioned Letter wrote me by Mr. *Boyer*.

“ At *Marseilles*, says he, we have pre-
 “ served the Custom of washing dead Bo-
 “ dies, or at least their Face and Hands.
 “ As they are generally interred with the
 “ Face uncovered, we dress them accord-
 “ ing to their Rank and Dignity, or cloath
 “ them with the peculiar Habits of the
 “ Fraternities of Penitents in which they
 “ were enrolled; and these Habits are of
 “ different Colours, for the Sake of Di-
 “ stinction. This Method is even used
 “ with those who die of the Small Pox,
 “ unless they are very much disfigured.
 “ But those who are cut off by malignant
 “ Fevers, especially in the Summer Time,
 “ are interred with the Face covered, and
 “ without the usual Ceremonies. In *Mar-*
 “ *seilles* we do not interr so precipitately as
 “ at *Paris*, but leave the Corps in the Bed,
 “ and under the Cloths, till the whole Fu-
 “ neral Apparatus is prepared, which re-
 “ quires several Days; for we cloath the
 “ dead Persons with new Habits, the young
 “ Women in white, the married in black,
 “ and the Men in Dresses suited to their re-
 “ spective Professions.

“ These

“ These Precautions and Ceremonies
 “ were not used in the Time of the last
 “ Plague ; for living Persons were hurried
 “ to the Grave, and I myself have seen
 “ some of them return to their own
 “ Houses.

“ In reading your Work continues Mr.
 “ Boyer, I have observed some Affinity be-
 “ tween what is practised in *Paris* in the
 “ Winter,, and what you observe with re-
 “ spect to the Customs of some Nations
 “ lying near the Poles ; for as soon as any
 “ Person is dead, or appears to be so, the
 “ Windows are opened, and the Person is
 “ laid out as soon as possible. To observe
 “ the Expedition with which Servants and
 “ Officers set about these Things, we
 “ would be ready to conclude that they had
 “ a singular Satisfaction in them, and
 “ looked upon them as religious Duties
 “ which could not be too soon performed.
 “ So that I cannot help thinking with Mr.
 “ Winslow and you, that at *Paris*, Inter-
 “ ments are made with too great Precipita-
 “ tion.”

The Christians, in Imitation of the *Jews*,
 have always interred their Dead. *Minutius*
Felix, in his Apology for Christianity, in-
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The UNCERTAINTY of their most loose and disengaged Parts are continually making their Escape, and nothing is more susceptible of Corruption than the animal Fluids, which are destitute of that compressory Motion which produces their Union and Connection.

To these Reflexions I shall only add, that the Certainty of Death arising from Putrefaction is in some measure cannonized by the Resurrection of *Lazarus*. *Jesus*, when going with his Apostles to *Bethany*, tells them that *Lazarus* was dead, and that he was glad of this Opportunity of confirming their Belief in him as the Messias. For this Purpose he orders himself to be conducted to the Tomb where *Lazarus* had now been four Days. *Martha*, the Sister of the Deceased, with a seeming Design to divert our Saviour from his Purpose, tells him that the Body was already corrupted so as to diffuse an ungrateful Smell; *Lord, by this Time he stinketh*. Now we cannot suppose that this Circumstance is related without some important Design: *Jesus Christ* was sure of the Death of *Lazarus*; his Sister did not doubt of it; the Spectators were persuaded of it, and the Corruption of the Body rendered the Fact unquestionable. Our Saviour, therefore, in order to work a Miracle to which no Objections could be made, restores Life to a putrified and corrupted Carcass; by which Means Incredulity

lity is rendered inexcusable, and his Divine Mission attested by the most irrefragable Proof. The Force of this Miracle, though sufficient to gain the Assent of the most Incredulous, yet influenced the *Jewish* Doctors to take all the Measures they could to get rid of the Person who was able to work such Prodigies.

Having thus shewn that Putrefaction is the only infallible Sign of Death, I shall subjoin some Reflexions of the last Importance relating to the same Subject.

First, then, we ought to be very diffident with respect to Deaths which have not been preceded by these Signs which are generally the Fore-runners of Death. Accidents of this Nature principally happen in all convulsive Disorders; such as Syncope, and the Suffocations of hysteric and hypochondriac Patients, of those who are seized with violent Passions, or tormented with racking Pains, and in all the Disorders in which the nervous System is affected. The same holds true with respect to all sudden Diseases, whether they proceed from an internal Cause, or an Apoplexy, or Catalepsy; or whether they are produced by external Accidents, such as Wounds, Falls, Contusions, or Suffocations occasioned either by a Compression of the *Arteria Trachea*, by Water, by continuing in a Place where there is not a due Quantity of Air, or whose Air

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146 The UNCERTAINTY of

is impregnated with noxious Vapours, or pernicious Exhalations, such as those of Charcoal, Narcotics, Arsenical Substances, Vitriolic Acids, and Fermenting Wine; for these Disorders, at least some of them, acting principally on the Nerves, may be justly classed among those of the convulsive or nervous Kind.

Secondly, When Death is dubious, or as yet not sufficiently evinced by a beginning Putrefaction, its infallible Sign; we ought so to treat the Body as not to hinder it from returning to Life, which would be the Consequence of laying it out in the usual Manner: Much less ought we, by a precipitate Interment, or shutting it up in a Coffin, to deprive it of any of the Means subservient to the Preservation of Life in general; such as a free Air, for Instance, since it is demonstrable that two hundred and fifty-two *Paris* Pints of Air are hardly sufficient to keep a Man alive for an Hour, so quickly do the Vapours of Respiration corrupt the Air which surrounds us. It must be owned, that, as in the Cases we now consider, the Respiration is very languid, so the Danger arising from the Corruption of the Air must be proportionably less. But as a Ballance to this, it is to be observed, that there is but a very small Quantity of Air contained in a Coffin already nearly filled by the Body; and it is, no doubt for this Reason, that
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some Joyners make Holes in the Tops of the Coffins, a Precaution which ought to be always and universally taken.

Thirdly, We ought to be in a particular Manner diffident with respect to those Deaths which succeed such Diseases as are not in their own Natures mortal, and which are easily distinguishable from less dangerous Disorders.

As we have already recommended a Diffidence with respect to all the Deaths which are not preceded by those Signs which are generally the Fore-runners of Death, it is but reasonable we should specify these Signs, in order to prevent Mistakes.

Every one, therefore, who has attentively observed Patients labouring under Disorders which terminated in Death. has perceived, that Medicines seemingly the most proper, have either proved prejudicial, produced no Effect at all, or only afforded a very transitory Relief; and each of these Cases is an inauspicious and unlucky Sign.

According to *Celsus*, in *Lib. 2. Cap. 6.* the Signs of a quick approaching Death, or at least of a very dangerous Disease, are these following. The Nose is pinched, the Temples sunk, the Eyes hollow, the Ears cold, the Skin of the Forehead hard and tense, and the Colour of the Face black, or extremely pale. *Celsus*, however, observes, that these Signs are not absolute

Prognostics of Death, except when they do not proceed from previous Watchings, from Fluxes, or from Hunger; in which Cases they only last for a Day. But if they are prolonged beyond the Time, the Prognostic is the same. If they continue for three Days in a Disorder of long standing, Death is not far off; especially if at the same Time the Patient can't endure the Light; if he sheds Tears; if the Whites of his Eyes become red, and the Veins dispersed through them pale; if the Liquor in the Eye adheres to its Angles; if one of the Eyes becomes smaller than the other; or if both of them become either hollow, or so inflated that the Eye-lids cannot touch each other during Sleep, but allow a small Portion of the White to be seen; if the Eye-lids, Lips, and Nose are pale; if the Eyes, the Nostrils, the Eye-lids, the Lips, the Eye-brows, or any of these Parts, are changed from their natural State; if the Weakness of the Patient is so great, that he neither hears nor sees; tho' at the same Time too exquisite a Sense or Hearing, is also a very bad Sign.

Death is also prognosticated when the Patient lies on his Back, contracts his Knees, falls down to the Foot of the Bed, uncovers his Arms and Legs, and tosses them from one Part to another, has his Extremities cold, is continually asleep, and being seiz'd
with

with a Delirium, contrary to his Custom when in Health, has a Shattering of his Teeth; when an Ulcer formed before or during the Disorder, is dried up, or becomes livid; when the Nails and Fingers become pale; when the Breath is cold; when, in Fevers, any acute Disorders, Madness, Pains of the Lungs or Head, the Patient picks the Bed-cloaths, and pulls any Eminences off the Wall; when Pains which have attacked the inferior Extremities, and passed from thence to the Viscera, cease all of a sudden; when the Pain of inflamed Parts ceases all of a sudden; when without any Tumor a feverish Patient is suddenly suffocated, or cannot swallow his Saliva, or has his Neck so turned that he can swallow nothing; when the Fever is continual, and the Patient extremely weak; when in a Fever the Skin becomes cold, and the internal Parts are rendered so hot as to produce Thirst; when in a Fever a Difficulty of Breathing or a Delirium comes on; when Sleep augments the Pain, and when in the Beginning of the Disorder the Patient vomits or purges black Bile; when the like Evacuations happen after the Body is exhausted by a long continued Disease; when cold Sweats happen in acute Diseases, or when in any Disorder the Patient vomits Blood, or a mixed Substance of various Colours, and when the Urine is for a long

Time aqueous, or becomes so all of a sudden.

The greater Number of these Signs concurs, the more surely Death will be prognosticated. But we are with *Celsus* to observe, that these Signs are not absolutely infallible, and that they are more fallacious in acute than in Chronical Diseases.

These Signs are generally the Fore-runners of Death, because they proceed from an internal Inflammation, or Gangrene, or a convulsive Motion of the nervous and membranous Parts, which is soon succeeded by a Stoppage of the Circulation, and consequently a Cessation of Life.

I intended to enlarge no farther on this Subject, my only Design being to apprise the Reader of the Danger to which he is continually exposed of being interred alive; a Danger not to be overlooked, since nothing is less certain than Life, or more uncertain than the Signs of Death, at least such Symptoms as are commonly taken for Signs of Death. But that the Work may be the more perfect, I shall add some important Reflections on the Accident which befel *Vesalius*, and an Account of the Measures most proper to be taken for the Relief of drowned Persons; and this Account, which was first published in 1740, has gained such a Reputation in the World, that it has been abridged by Mr. *Reamur*,
inserted

inserted in the *Memoirs de l'Acad. Royale*, and by Mr. *Argenson*, first Minister of State to the King of *France*, distributed through all the Parts to which his Influence extended.

Mr. *Winslow* evidently proves, that the most cruel chirurgical Operations are sometimes insufficient to ascertain Death; and that Putrefaction is the only certain and infallible Sign of it.

From these Principles I conclude,

1st. That it is to no Purpose to use the most cruel chirurgical Operations: And

2^d. That it is necessary to abstain from such as may prove mortal to the Patient. Mr. *Winslow* is indeed so far from recommending Operations of this last-mentioned Kind, that he calls the plunging a long Needle under the Nail of an Apoplectic Patient's Toe, rash.

But if Mr. *Winslow* thinks it rash to make a simple Puncture in a nervous Part, we ought not surely to entertain a favourable Notion of the large and enormous Incisions made in Dissections.

Those, indeed, who are dissected, run no Risque of being interred alive. The Operation is an infallible Means to secure them from so terrible a Fate. This is one Advantage which Persons dissected have over those who are, without any farther Ceremony, shut up in their Coffins.

As those who reflect upon the Accident which happened to *Vesalius*, that before related by *Terilli*, and another which lately happened in *France*, are sensible that these Antagonists did not perceive their Subjects were alive, till they had rendered it impossible for them to escape Death; they must no doubt conclude that Dissections may sometimes prove mortal.

Though it is not said that the Woman mentioned by *Terilli* died of the Operation, yet this no doubt happened, because she discovered the Signs of Life at the second Stroke of the Knife. But it is very certain that she underwent an Operation, which was not only dangerous in its own Nature, but also which laid a Foundation for long continued subsequent Dressings, during which the Patient is continually exposed to fatal Accidents. In order to be convinced of this, no more is requisite than to consult such Authors as have wrote concerning the Gastroraphy, or Suture of the Abdomen.

The two unfortunate Persons who are the Subjects of the other two Histories, were not so happy, since they did not discover the Signs of Life till the Operation had rendered their Death infallible. These two Instances sufficiently convince us of the Uncertainty of the Signs of Death, of the Insufficiency of surgical Tests, and their
Danger

Danger when mortal in their own Natures, and of the Possibility of such an Abolition of all the Senses as would not be credible, was it not confirmed by well attested Instances.

Hence it follows, that Persons in some Situations may suffer crucial Incisions thro' the whole Extent of the Abdomen, without discovering any Signs of the remaining Principle of Life they have in them. Hence it also follows that some Persons may, without the least Signs of Sensibility, suffer an Incision not only of the Abdomen, but also of the Teguments and Muscles which cover the Breast; of the Cartilages of the Ribs; of the intercostal Muscles; of the Pleura, that highly sensible Membrane which lines the Thorax, and even the Fracture of the Ribs, in order to discover the Heart.

The Historians, indeed, who relate the Accident which happened to *Vesalius*, do not inform us that he began his Operation on the Abdomen; but I have just Reason to believe that he did so; first, because he was passionately fond of Anatomy, and consequently cannot be supposed to have neglected any Opportunity of examining the State and Condition of the Abdominal Viscera: Secondly, because it was in his Time become customary to begin Dissections on the Abdomen, unless the Operator was ab-

solutely certain that nothing preternatural was to be found there: And, thirdly, because the Causes of the Disorder being unknown to that celebrated Physician, he cannot be presumed to have neglected the Examination of any Cavity of the Body in order to discover them. On which Supposition he must, no doubt, have begun by the Abdomen.

But granting that *Vesalius* began by opening the Breast, it is still certain that he could not discover the Heart without taking the Steps already mentioned; and the History informs us, that he was not apprized of the Patient's being alive, until the Palpitation of the Heart evinced that important Circumstance.

It would be frivolous to object, that in the History of *Vesalius* Embalming is not meant; for it is not the Intention of the Operator which constitutes the Temerity, but the Nature of the Operation, and the Circumstances in which it is performed. Besides, it is easy to shew that Embalming is still more inevitably mortal than the Operation performed by *Vesalius*.

For that Anatomist only made a simple Incision in the Abdomen, in order to examine its Viscera; whereas in Embalming, the Intestines are taken out, and the Arteries and Nerves cut in the Mesentery adhere to the
Border

Border of the Intestines; a Circumstance which renders Death inevitable.

It may, perhaps, be said, that the Pain excited by the Wound inflicted in these Membranes and Nerves may discover the Signs of Life.

The Answer is easy: Perhaps such a Thing may happen, but it must necessarily happen too late; for Embalmings are not set about with the same Precautions used in anatomical Dissections or chirurgical Operations. The sooner the Work is over the better. No Part is spared; the Knife and Bistery are used without Caution or Reserve. But what is still more terrible is, that it is possible to make an Incision in the Mesentery, without rousing the Signs of Life; for it is certain that the Mesentery is much less sensible than the Pleura; and yet the Incision of the Pleura and Fracture of the Ribs, succeeded by a Dilaceration of that Membrane, much more painful than a simple Incision, did not produce the Signs of Life in the Patient, who died under the Hands of *Vesalius*.

The third Accident I mentioned, also happened in Embalming.

It is therefore certain, that Embalming may prove insufficient to produce the Signs of Life in due Time to preserve the Patient; that a Surgeon cannot proceed to that Operation without Danger of murdering the Patient

Patient, till he is absolutely certain of the Death; and that no one ought to attempt the Operation till the Signs of Putrefaction are evident, and consequently an Error is rendered impossible.

Some Surgeons before they begin this Operation made Incisions in the Soles of the Feet; and their Intention is certainly laudable, since by this Means they think to ascertain the Death of the Subject. But if, as Mr. Winslow judiciously observes, it is Rashness to plunge a long Needle under the Nail of the Toe, it certainly must be the Height of Madness to make deep and long Incisions in these highly nervous and sensible Parts, especially since such a Procedure may after all prove insufficient to produce the Signs of Life; for to what Misfortune does not such an Incision expose a Subject, as yet alive, and consequently capable of being cured. The most superficial Knowledge of Anatomy and Surgery is sufficient to evince this, so that we may justly conclude, that Embalming cannot be safely undertaken, till Putrefaction has fully ascertained Death.

M E A S U R E S

To be taken for the RELIEF of
those, who are thought to be
drowned.

THAT in populous Towns, and even
in less considerable Places, situated on
the Banks of Rivers, some Persons
have almost every Year the Misfortune to
be drowned, is a Truth not to be called in
Question; but it is not equally known and
believed, that many Persons taken out of
the Water without any Appearance of Life,
would be rescued from approaching Death,
if, for a sufficient Time, the proper Means
of Relief were afforded.

After some short Attempts, we continue
to esteem as dead, those in whom all Ap-
pearance of Life seems to be extinguished,
especially if they have remained for a con-
siderable Time, a few Hours for Instance,
in the Water; in which Case no Measures
are taken for their Recovery. Histories,
How-

however, related by Authors worthy of Credit, sufficiently evince, that the Lives of Men who for several Hours have been not only in, but under Water, have been preserved, and that sometimes two Hours have elapsed, before there appeared any Sign that they were not really dead. The steep and dangerous Banks of some deep Lakes at *Switzerland* frequently occasion dismal Accidents of this Nature. The good Success of the Measures used for restoring such Persons, sometimes sooner and sometimes later, have been published in the *Swiss Mercury*, and these Measures we shall here enumerate; since it is to be wished that they were universally known, that they could be put in Practice on all Occasions that require them, and that in putting them in Practice, the World might discover Measures still more efficacious and infallible.

Formerly it was thought the best and most expedient Thing that could be done, for the Recovery of the drowned Person, to hang him up by the Heels; but since, from the Dissections made by skilful Anatomists, it is certain, that drowned Persons have generally less Water in their Stomachs, than if they had voluntarily drank a considerable Quantity, it does not seem expedient to put the drowned Person in a Position, which would prove uneasy as soon as the Humours of the Body should resume their
ordinary

ordinary Motion. It may however happen, that the Person may have swallowed too much Water; then, in order to know whether he has or not, and to make him vomit it up if he has, it is proper to put him into a Tun, open at both Ends, and which for some Time is to be rolled backwards and forwards in different Directions. He may also be excited to vomit the Water by frequent introducing into the Œsophagus the bearded End of a Feather.

After taking off the Cloaths of the drowned Person, instead of letting him lie stretched and naked on the Shore, which is too often the Practice, we ought with the utmost Expedition to shelter him from the Impressions of the cold Air, and begin to warm him by wrapping him up with Cloaths and Coverings.

In order to warm him the more effectually, he is afterwards to be put into a Bed, the Clothes of which are pretty warm, applying also frequently to his Body hot Napkins and Cloths.

There are Instances of drowned Persons, on whom the Influences of a hot and scorching Sun, to which they have been exposed, have produced the same happy Effects, which the warm Clothes have upon others. Some have been warmed in hot Baths, but these are not on all Occasions to be had.

The

The great Intention to be pursued is, to put the solid Parts of the Machine in Action, that thus they may restore the Motion of the Fluids. In order to answer this Intention, the drowned Person is not to be left in Bed in a State of Rest, but agitated in an hundred different Manners, turned from one Position to another, lifted up and let fall, and shaken in various Directions in the Arms of Persons of Strength sufficient for that Purpose.

Spirituos Liquors ought also to be poured into his Mouth; and where these cannot be had, it is customary to pour warm Urine into it, which has been observed to produce happy Effects. Some prescribe a Decoction of Pepper and Vinegar to be used as a Gargarism.

We must also attempt to irritate the internal Fibres of the Nose, either by volatile Spirits, and the Liquors used in Apoplectic Cases, or by tickling the Nerves distributed to the Nostrils by the bearded Part of a Feather, or by blowing into the Nostrils thro' a Quill, Snuff, or some more powerful Sternutatory.

One of the Measures taken with such drowned Persons as have been restored to Life, has been by Means of a Quill, or small Pipe, to blow warm Air into their Mouths, that thus it might be conveyed into their Intestines; into which it has also been

been successfully introduced by Means of a Pair of Bellows. For this Purpose we may also use a Syringe, which might perhaps be still employed to better Purpose, in injecting warm Clysters capable of irritating the Intestines, and producing more considerable Effects than the Air generally conveyed to them.

But perhaps the most efficacious Method that can be taken with a drowned Person, is by Means of a proper Pipe to blow the Smoke of Tobacco into his Intestines: There have been several Instances, at once of the speedy and happy Effects of this Smoke on drown'd Persons*.

None of all these measures specified ought to be neglected, since they may possibly concur

* The celebrated Dr. Mead in his *Mechanical Account of Poisons*, after mentioning that many who have been drowned, and dead to all Appearance, have been surprisingly recovered to Life, says, 'This should certainly incourage the Use of all Means upon such Accidents, especially since the Trial is not difficult. The first Step should be, to blow up the Smoke of Tobacco into the Intestines; then to warm the Body by shaking and rolling about, and rubbing it with warm Cloaths in Bed: In a Word, to put the Blood into Motion by all Manner of Ways; and not to be discouraged, though no Signs of Life should be discovered after an Hour or two spent in this good Work: towards the latter End of which volatile Spirits and Salts may have a good Effect. Neither should Bleeding be omitted, when the Blood is become warm enough to drop out of the Veins.'

concur to produce an happy and salutary Effect; but they will prove most successful, when taken under the Management and Inspection of a judicious Physician. If a Surgeon can be had, Vænesectiõ is by no Means to be neglected, and perhaps it is most commodiously instituted in the Jugular Vein; for in drowned Persons, as well as in those that are hanged, or seized with an Apoplectic Fit, the Veins of the Neck are too much distended and choaked with Blood: Now if these Veins can happily be in some Measure emptied, they will be in a more proper Condition to act upon the Fluid they contain, and which, in order to restore the Patient, they ought to put in Motion.

When these Measures prove unsuccessful, the Surgeon's last Recourse is to Bronchotomy, or opening the Arteria Trachæa; for perhaps the Air entring freely into the Lungs, thro' the Aperture made in the Canal, thro' which they received it in their natural State, and the warm Air which may be blown thro' this Aperture, will restore the Playing of the Lungs and all the Motions of the Breast.

But we must carefully advise all those who shall employ themselves in the humane and beneficent Office of restoring drowned Persons, not to be discouraged, if the first Appearances do not answer their Expectations;

tions; for it is certain from Experience, that some drowned Persons have not begun to discover any Signs of Life, till they have been tossed about and tormented for more than two Hours. Besides, the Man who has succeeded in restoring to Life a Person, whose Death without his Assistance was certain, is sufficiently rewarded for his Pains by the Success; and if his Pains and Diligence should fail of their desired Effects, he will still receive an exalted Pleasure from a Reflection on his having acted with the most noble and generous Views.

That the Plan of Mr. *Winslow* and Dr. *Brubier* may want no Circumstance to render it perfect, we shall in the last Place observe, that Bronchotomy, tho' commonly looked upon as a formidable Operation, is yet of the last Importance for the Preservation of Life; since it is no less beneficial and effectual in Suffocations arising from Quinsies and Inflammations of the Throat, than in those produced by Submersion, or what we commonly call Drowning.

Thus the celebrated *Heister* tells us, that if Persons drowned are already, tho' but just dead, their Aspera Arteria is to be open'd with all Expedition, either with an Incision-Knife, or any other Instrument the Surgeon shall judge proper; then it is expedient to blow strongly into the Orifice made either with the Mouth, or by Means of a
Pipe,

Pipe, if any such thing is at hand, because in this Case above all others Delays are dangerous: For that justly celebrated Physician *Dethardinguis*, some time Professor of Physic at *Rostock*, now at *Copenhagen*, in 'a Dissertation on this very Subject, published not long ago, informs us, that by this Method, if speedily put in Execution, Life returns to the suffocated Patient together with the injected Air, and that he is in a Manner miraculously raised from the Dead. For this Reason, I think the Operation is not in Cases of this Nature to be neglected, but performed whenever the Opportunity offers, with all the Haste and Expedition imaginable.

I am sufficiently apprised, that a great many Physicians forbid an Incision in the *Aspera Arteria*, and consequently condemn this Operation, because they think it productive of Death, and are therefore prompted by a foolish Zeal to brand their Fellow-Physicians, who attempt an Operation so dangerous in their Eyes, with the odious Appellations of barbarous and inhuman. But the Gentlemen who are of this narrow and confined Way of thinking, are grossly mistaken; since in this Operation the small Incisions made in the *Aspera Arteria* are so far from killing the Patient, that they do not even produce that Effect, when made considerably large: For this Reason, we think

think ourselves justly authorized with *Casseri* [in *Tract. de Vocis Auditusque Organis*] to pronounce those Surgeons unskilful, cowardly, and even cruel, who in Cases of this Nature foolishly neglecting the Operation, which is often safe in itself, and attended with the most speedy and salutary Effects, suffer the Patients to die for want of this proper and seasonable Assistance.

That the Surgeon may not therefore be at a Loss to perform his Duty, and afford Relief, and even fresh Life to those who are drowned, he may even perform this Operation in such of the following Methods as he shall judge most expedient, observing that the Part of the *Trachæa* most proper for the Aperture, is that situated between its second and third cartilaginous *Annuli* or Ringlets, tho' the Incision may be made a little lower without any Danger.

I. First then, the Patient is to be placed in a reclining Posture, either in a Bed, or in some convenient Chair, and his Head is to be held firm by an Assistant standing behind his Back; then a longitudinal Incision thro' the Skin, Fat, and Muscles is to be made from about two Fingers Breadth below the *Cartilago Thyroides*, or *Scutiformis*, or the *Pomum Adami* in the Middle of the *Trachæa* down to the superior Part of the *Sternum*; so that the Length of the Incision may

may be equal to two or thre, or even in tall Patients to four Fingers Breath.

Then an Assistant is carefully to draw the Lips of this Orifice from each other, either with proper Hooks or his Fingers; and having absorbed and wiped away the Blood, either by a Sponge or a Linen Cloth, so that the Aspera Arteria may be seen, three or four of the Ringlets of this Spiral are to be cut in such a Manner, as that the Incisions made in the whole may form one continued Line. This Method is but little used by modern Surgeons, and seems more proper to afford Relief, when a Bean, a Pea, a Cherry-Stone, or any other foreign Substance, falls into the Aspera Arteria, than to restore Life, when the Patient is suffocated, for want of Air, or by Means of Submersion or Drowning, in which Cases the following Methods are more expedient.

2. The Patient is to be placed in a Bed or Chair with his Head reclined at the Surgeon's Discretion, and held firm by an Assistant, as we have already said; then let the Surgeon make an Incision in that middle Part of the Throat, and in that Manner we have above directed, till he reaches the Trachea itself; or if it is thought proper, the Skin also on both sides may be laid hold of by the Surgeon and his Assistant; then it may be raised and cut longitudinally; after which, the Fat and Muscles lying above the
Trachea

Trachea may be cut: Some would have these Muscles previously disengaged and warily separated from the Trachea; but there is no Occasion for all this Labour, since they may be cut safely and without any Danger. Then the Surgeon cleanses the Wound with a Sponge wrung out of warm Wine or Spirit of Wine, for the more effectual stopping of the Blood, and orders his Assistant to separate and retract its Lips, either by Means of proper Hooks or his Fingers: Then he passes his Knife between two of the Ringlets of the Trachea, or he may even pass it in such a Manner, as to divide one of them, since by that Means any Silver or Leaden Pipe, whether round or flat, may the more conveniently be inserted into the Wound, for making the Inflation. But before the Surgeon withdraws his Knife a proper Probe is to be introduced by its side, that the Pipe may be afterwards the more easily inserted.

3. Another and more expeditious Method of opening the Trachea is this: A two-edged Knife is applied to the abovementioned Part of the Throat, and cautiously passed thro' the Skin, Fat, and Muscles, in the Cavity of the Trachea itself, and a Pipe for making the Inflation forthwith inserted into the Wound in the Manner already directed. This Method is not only more expeditious,

peditions, but also leaves a less considerable Cicatrix than the former.

4. The fourth and last Method of performing this Operation is by Means of a Trocar, which is to be so applied to the Middle of the Trachea, as that it may at one Thrust be passed thro' the Skin, Fat, and Muscles, into its very Cavity; and having drawn out the perforating Part, let the Pipe remain in order to make the Inflation. This Method was invented by *Fredericus Dieker*, sometime Professor of Physick at *Leyden*; who has described it in his *Exercit. Pract.* This Method of performing the Operation seems in one Respect to have one Advantage of all the rest, which is, that it is soon over; and the Pipe at the same Time introduced into the Wound with far greater Ease, and with much less Pain to the Patient, if he has still any Life in him. But even when the Operation is performed in this Manner, great Caution and Circumspection are necessary,

After the Operation is performed in any of these Manners, the Wound is to be healed by keeping its Lips in Contact by Means of adhesive Plasters, and the Application of proper Compress and Bandage, It is afterwards to be carefully conglutinated by the vulnerary Balsams proper in other Wounds of the *Aspera Arteria*. Some, in order to induce a more speedy and seemly

Cicatrix

Cicatrix, recommend the Method of Conglutination by Suture, as in the Cure of the Hare-Lip by passing Needles thro' the Lips of the Wound: But it is no doubt highly improper to follow a Practice, which is attended with immense Pain to the Patient, when at the same Time a Method, which is not only far milder, but also equally safe and secure, may be fallen upon.

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